

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:07:01 ; Search time 39.4564 Seconds
(without alignments)
1198.803 Million cell updates/sec

Title: US-09-852-797-76

Perfect score: 1521

Sequence: 1 MARRSRHRLLLRLYLVA.....SSKATTMSSEDFKTKSFII 298

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1107863 seqs, 158726573 residues

Total number of hits satisfying chosen parameters: 1107863

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : A_Geneseq_19Jun03.*

1: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1980.DAT.*
2: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1981.DAT.*
3: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1982.DAT.*
4: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1983.DAT.*
5: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1984.DAT.*
6: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1985.DAT.*
7: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1986.DAT.*
8: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1987.DAT.*
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11: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1990.DAT.*
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14: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1993.DAT.*
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16: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1995.DAT.*
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18: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1997.DAT.*
19: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1998.DAT.*
20: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1999.DAT.*
21: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA2000.DAT.*
22: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA2001.DAT.*
23: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA2002.DAT.*
24: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA2003.DAT.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1518	99.8	298	19	Secreted protein e
2	1518	99.8	298	22	Human functional a
3	1518	99.8	298	23	Human polypeptide
4	1517	99.7	298	19	Human secreted pro
5	1517	99.7	298	23	Human gene 25 enco
6	1517	99.7	298	23	Human gene 25 enco
7	1517	99.7	298	24	Human secreted pro
8	1517	99.7	298	24	Human secreted pro
9	1517	99.7	298	24	Human gene 162 enc

10	1514	99.5	298	24	AAO16452	Human functional a
11	1502.5	98.8	303	22	AAW23693	Human EST encoded
12	1465	96.3	312	20	AAW08060	Human PRO245 prote
13	1465	96.3	312	20	AAW23324	A33 related antige
14	1465	96.3	312	20	AAW13354	Amino acid sequenc
15	1465	96.3	312	21	AAW33421	Human PRO245 prote
16	1465	96.3	312	21	AAW24401	Human PRO245 prote
17	1465	96.3	312	21	AAW70568	Human PRO245 prote
18	1465	96.3	312	22	AAU12339	Human PRO245 polyp
19	1465	96.3	312	22	AAU00821	Human immune respo
20	1465	96.3	312	22	AAW80222	Human PRO245 prote
21	1465	96.3	312	22	AAW53081	Human angiogenesis
22	1465	96.3	312	24	ABU69632	Novel human secret
23	1465	96.3	312	24	ABU71455	Human PRO polypept
24	1465	96.3	312	24	ABU71901	Human secreted/tra
25	1465	96.3	312	24	ABU07738	Human A-33 related
26	1465	96.3	312	24	ABU66737	Human PRO polypept
27	1465	96.3	312	24	ABU67013	Human secreted/tra
28	1465	96.3	312	24	ABU67355	Human secreted pro
29	1465	96.3	312	24	ABU59818	Novel secreted and
30	1465	96.3	312	24	ABU64509	Human secreted/tra
31	1465	96.3	312	24	ABU54357	Human secreted/tra
32	1459	95.9	312	22	AAW50904	Human secreted/tra
33	1242.5	81.7	388	22	ABG22341	Human PRO245 prote
34	1184	77.8	298	21	AAW27273	Novel human diagno
35	1184	77.8	298	21	AAW27275	Human confluency r
36	1143	75.1	222	22	AAW41947	Murine confluency
37	1106	72.7	215	22	AAW70500	Human polypeptide
38	1092	71.8	213	21	AAW27277	Angiogenesis prote
39	702.5	46.2	140	22	AAW22338	Human confluency r
40	547	36.0	107	22	AAW40161	Novel human diagno
41	498	32.7	310	21	AAW27272	Human polypeptide
42	498	32.7	310	21	AAW27278	Human confluency r
43	482	31.7	310	24	AAO16453	Murine confluency
44	481	31.6	310	21	AAW27276	Human functional a
45	481	31.6	310	21	AAW33457	Human confluency r

ALIGNMENTS

RESULT 1

AAW85457

ID AAW85457 standard; Protein; 298 AA.

XX
AC AAW85457;

DT 25-FEB-1999 (first entry)

XX
XX Secreted protein encoded by clone ct864_4.

XX Secreted protein; nutritional activity; immune stimulating; vaccine;
XX suppressing activity; haematopoiesis regulating activity;
XX tissue growth activity; activin; inhibin activity; chemotaxis;
XX chemokinetic activity; haemostasis; thrombolytic activity; receptor;
XX ligand; anti-inflammatory; cadherin; tumour invasion suppressor;
XX tumour inhibition; gene therapy.

OS Homo sapiens.

XX
PN WO9842739-A2.

XX
PD 01-OCT-1998.

XX
PF 20-MAR-1998; 98WO-US05653.

XX
PR 19-MAR-1998; 98US-0044466.

XX
PR 21-MAR-1997; 97US-0822167.

PA (GENY) GENETICS INST INC.

XX Agostino MJ, Jacobs K, Lavallie ER, McCoy JM, Merberg D;
PI Racie LA, Spaulding V, Treacy M;

bed date

XX WPI: 1998-609890/51.
 DR N-PSDB; AAV82780.
 XX
 XX New polynucleotides encoding secreted human proteins - derived from
 PT human foetal brain, adult brain, foetal kidney, placenta or adult
 PT pineal gland cDNA libraries.
 XX
 XX Claim 17; Page 73-74; 113pp; English.
 XX
 CC The present sequence represents a secreted protein. The polynucleotide
 CC and secreted protein are predicted to have biological activities which
 CC would make them suitable for treating, preventing or ameliorating medical
 CC conditions in humans and animals, although no supporting data is given.
 CC Suggested activities include nutritional activity, immune stimulating
 CC (e.g. as vaccines) or suppressing activity, haematopoiesis regulating
 CC activity, tissue growth activity, activin/inhibin activity,
 CC chemotactic/chemokinetic activity, haemostatic and thrombolytic activity,
 CC receptor/ligand activity, anti-inflammatory activity, cachexin/tumour
 CC invasion suppressor activity, and tumour inhibition activity (no data is
 CC given in the specification to support these activities). The
 CC polynucleotide is also stated to be useful for gene therapy.
 XX
 SQ Sequence 298 AA;
 Query Match 99.8%; Score 1518; DB 19; Length 298;
 Best Local Similarity 99.3%; Pred. No. 1.1e-118;
 Matches 296; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1 MARRSRHRLLLRLRYLVVALGYHKAYGFSAPKDDQVVTAVYQEAAILACKTPKKTYSR 60
 DB 1 MARRSRHRLLLRLRYLVVALGYHKAYGFSAPKDDQVVTAVYQEAAILACKTPKKTYSR 60
 QY 61 LEWKKLGRSVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCVSPSEOGQN 120
 DB 61 LEWKKLGRSVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCVSPSEOGQN 120
 QY 121 LEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
 DB 121 LEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
 QY 181 LGSQSTNSSYTMNTKTGTLQFNVTSKLDTGEYSCEARNVGVYRCPCGKRMQVDDLNTSGI 240
 DB 181 LGSQSTNSSYTMNTKTGTLQFNVTSKLDTGEYSCEARNVGVYRCPCGKRMQVDDLNTSGI 240
 QY 241 IAAVWVALVISVCGLVGCYQAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSFII 298
 DB 241 IAAVWVALVISVCGLVGCYQAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSFII 298
 RESULT 2
 AAU00512
 ID AAU00512 standard; Protein; 298 AA.
 XX
 AC AAU00512;
 XX
 DT 09-MAY-2001 (first entry)
 XX
 DE Human junctional adhesion protein (JAM2).
 XX
 KW Junctional adhesion protein; JAM2; cellular localisation;
 KW cellular expression; immunoprecipitation; stroke; phosphorylation;
 KW glycosylation; paracellular migration; inflammatory disease;
 KW arthritis; asthma; rheumatoid arthritis; inflammatory bowel disease;
 KW Crohn's disease.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Peptide 1..20
 FT /note= "Possible signal peptide #1"
 FT Peptide 1..28
 FT /note= "Possible signal peptide #2"

FT Protein 21..298
 FT /note= "Possible mature JAM2 #1"
 FT Protein 29..298
 FT /note= "Possible mature JAM2 #2"
 FT Domain 237..254
 FT /note= "Transmembrane domain"
 XX
 PN W0200114404-A1.
 XX
 XX 01-MAR-2001.
 XX
 XX 23-AUG-2000; 2000WO-US23158.
 XX
 XX 24-AUG-1999; 99US-0150459.
 XX
 XX (TEXA-) TEXAS BIOTECHNOLOGY CORP.
 XX
 XX Cunningham S, Trinidad Arrate Barros M;
 XX WPI: 2001-218425/22.
 DR N-PSDB; AAS00512.
 XX
 PT Novel nucleic acids encoding human junctional adhesion protein useful
 PT for producing antibodies that are suitable for therapeutic purposes -
 XX
 XX Claim 4; Page 46-47; 51pp; English.
 XX
 CC The sequence represents a human junctional adhesion molecule 2 (JAM2).
 CC The polynucleotide encoding the polypeptide is useful for recombinant
 CC production of JAM-2 protein, which in turn is useful for the production
 CC of antibodies. The antibodies may be used for probing cellular
 CC localisation and/or expression of JAM2 in tissues under normal and
 CC disease states, for immunoprecipitating JAM2 protein from cells and/or
 CC stroke tissues to determine whether it is modified by glycosylation and
 CC phosphorylation, and for determining JAM2 function. The antibodies
 CC inhibit interaction of JAM2 with inflammatory cells or influence their
 CC paracellular migration, and is therefore useful for alleviating
 CC inflammatory diseases such as arthritis, asthma, rheumatoid arthritis,
 CC inflammatory bowel disease and Crohn's disease.
 XX
 SQ Sequence 298 AA;
 Query Match 99.8%; Score 1518; DB 22; Length 298;
 Best Local Similarity 99.3%; Pred. No. 1.1e-118;
 Matches 296; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1 MARRSRHRLLLRLRYLVVALGYHKAYGFSAPKDDQVVTAVYQEAAILACKTPKKTYSR 60
 DB 1 MARRSRHRLLLRLRYLVVALGYHKAYGFSAPKDDQVVTAVYQEAAILACKTPKKTYSR 60
 QY 61 LEWKKLGRSVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCVSPSEOGQN 120
 DB 61 LEWKKLGRSVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCVSPSEOGQN 120
 QY 121 LEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
 DB 121 LEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
 QY 181 LGSQSTNSSYTMNTKTGTLQFNVTSKLDTGEYSCEARNVGVYRCPCGKRMQVDDLNTSGI 240
 DB 181 LGSQSTNSSYTMNTKTGTLQFNVTSKLDTGEYSCEARNVGVYRCPCGKRMQVDDLNTSGI 240
 QY 241 IAAVWVALVISVCGLVGCYQAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSFII 298
 DB 241 IAAVWVALVISVCGLVGCYQAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSFII 298
 RESULT 3
 ABP61801
 ID ABP61801 standard; Protein; 298 AA.
 XX
 AC ABP61801;
 XX

DT 04-OCT-2002 (first entry)
XX Human polypeptide SEQ ID NO 155.
DE
KW Human, cytostatic; antirheumatic; antiarthritic; vulnerary; analgesic;
KW antiinflammatory; antibacterial; immunosuppressive; antiparkinsonian;
KW neuroprotective; nootropic; osteopathic; haemostatic; vasotrophic;
KW antitumor; fungicide; antidiabetic; antiasthmatic; antiallergic;
KW immunostimulant; antiparasitic; secreted protein; transmembrane protein;
KW cytokine; cell proliferation; cell differentiation; autoimmune disease;
KW stem cell; growth factor; nervous system disease; neuropathy;
KW Alzheimer's disease; Parkinson's disease; Huntington's disease;
KW osteoporosis; severe combined immunodeficiency; SCID; infection;
KW multiple sclerosis; rheumatoid arthritis; gene therapy.
XX
OS Homo sapiens.
XX
XX US2002065394-A1.
XX
XX 30-MAY-2002.
XX
XX 22-DEC-2000; 2000US-0745763.
XX
XX 18-MAR-1998; 98US-0040963.
XX
XX (JACO/) JACOBS K.
XX (MCCO/) MCCOY J M.
XX (LAVA/) LAVALLIE E R.
XX (COLL/) COLLINS-RACIE L A.
XX (EVAN/) EVANS C.
XX (MERB/) MERBERG D.
XX (TREA/) TREACY M.
XX (SPAU/) SPAULDING V.
XX
XX Jacobs K, McCoy JM, Lavallie ER, Collins-Racie LA, Evans C;
XX Merberg D, Treacy M, Spaulding V;
XX
XX WPI; 2002-582343/62.
XX N-PSDB; ABQ92017.
XX
XX Novel secreted or transmembrane protein and polynucleotide encoding the
XX protein, useful for diagnosis and treatment of neurological disorders,
XX cancer, autoimmune diseases, bone disorders and lung or liver fibrosis
XX
XX
XX Claim 54; Page 116-117; 284pp; English.
XX
XX The invention relates to human secreted or transmembrane protein (I),
XX their fragments and is encoded by specific complementary deoxyribonucleic
XX acid (cDNA) inserts (II), where the protein is substantially free from
XX other mammalian proteins. (I) are useful for preventing, treating or
XX ameliorating a medical condition, especially immunological treatment or
XX prevention of tumours. (I) exhibits activity relating to angiogenesis,
XX cytokine, cell proliferation, cell differentiation, antiinflammatory,
XX stem cell growth factor activity and activin or inhibin-related
XX activities. (I) can be used to manipulate stem cells in culture to give
XX rise to neuroepithelial cells that can be used to augment or replace
XX cells damaged by illness, autoimmune disease, accidental damage or
XX genetic disorders. (I) induces the proliferation of neural cells and
XX regeneration of nerve and brain tissue and is useful for the treatment of
XX central and peripheral nervous system diseases and neuropathies, such as
XX Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic
XX lateral sclerosis. (I) is involved in chemotactic or chemokinetic
XX activity, regulation of haematopoiesis and is useful for treating myeloid
XX or lymphoid cell disorders, platelet disorders such as thrombocytopaenia
XX and for regeneration of bone, cartilage, tendon, ligament and/or nerve
XX tissue growth and in tissue repair, healing of burns, incisions, ulcers,
XX for treating osteoporosis, osteoarthritis, bone degenerative disorders or
XX periodontal disease. (I) is also useful for gut protection or
XX regeneration and treatment of lung or liver fibrosis, reperfusion injury
XX in various tissues, various immune deficiencies and disorders including
XX severe combined immunodeficiency (SCID), bacterial or fungal infections,
XX autoimmune disorders e.g. multiple sclerosis, rheumatoid arthritis,

CC diabetes mellitus, myaesthesia gravis, allergic reactions and conditions,
CC such as asthma or other respiratory problems. (II) is useful to express
CC recombinant protein, as markers for tissues in which the corresponding
CC protein is preferentially expressed and in gene therapy. The present
CC sequence is that of a polypeptide of the invention.
XX
SQ Sequence 298 AA;
Query Match 99.8%; Score 1518; DB 23; Length 298;
Best Local Similarity 99.3%; Pred. No. 1.1e-118;
Matches 296; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1 MARRSRHRLLLLRLLYLVWALGYHKAQYGFAPKDDQVVAVVXYQEAAILACKTPKTKVSR 60
Db 1 MARRSRHRLLLLRLLYLVWALGYHKAQYGFAPKDDQVVAVVXYQEAAILACKTPKTKVSR 60
Qy 61 LEWKKLGSRVSFVYYQQTLOGDFKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQN 120
Db 61 LEWKKLGSRVSFVYYQQTLOGDFKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQN 120
Qy 121 LEEDTVTLELVAPAVPSCVPSALSCTVVELRCQDKEGNPAPEYTFWKGIRLLENPR 180
Db 121 LEEDTVTLELVAPAVPSCVPSALSCTVVELRCQDKEGNPAPEYTFWKGIRLLENPR 180
Qy 181 LGSQSTNSSYTMNTKTGTLOFNTVSKLDTGEYSCARNVGYRRCPCGRMVDLNLISGI 240
Db 181 LGSQSTNSSYTMNTKTGTLOFNTVSKLDTGEYSCARNVGYRRCPCGRMVDLNLISGI 240
Qy 241 IAAVWVVALVISVGLGVCAQKGYFSKTSFKNSSSSKATMTSENDFKHTKSFI 298
Db 241 IAAVWVVALVISVGLGVCAQKGYFSKTSFKNSSSSKATMTSENDFKHTKSFI 298
RESULT 4
AAW75220
ID AAW75220 standard; Protein; 298 AA.
AC AAW75220;
XX
XX 29-JAN-1999 (first entry)
XX Human secreted protein encoded by gene 25 clone HTEEB42.
XX
XX Human; secreted protein; fusion protein; gene therapy; protein therapy;
XX diagnosis; tissue; cancer; tumour; neurodegenerative disorder; leukaemia;
XX developmental abnormality; foetal deficiency; blood; allergy; renal;
XX immune system; asthma; lymphocytic disease; brain; hepatic; lymphoma;
XX inflammation; ischaemic shock; Alzheimer's disease; restenosis; AIDS;
XX cognitive disorder; schizophrenia; prostate; obesity; osteoclast; thymus;
XX osteoporosis; arthritis; testis; lung; thyroiditis; thyroclast; digestion;
XX endocrine; metabolism; regulation; malabsorption; gastritis; neoplasm.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX Misc-difference 42 /label= unknown
XX Misc-difference 58 /label= unknown
XX
XX WO9840483-A2.
XX
XX 17-SEP-1998.
XX
XX 12-MAR-1998; 98WO-US04858.
XX
XX 19-DEC-1997; 97US-0068368.
XX 14-MAR-1997; 97US-0040710.
XX 14-MAR-1997; 97US-0040762.
XX 30-MAY-1997; 97US-0048100.
XX 30-MAY-1997; 97US-0048189.
XX 30-MAY-1997; 97US-0048357.
XX 30-MAY-1997; 97US-0050934.
XX

Applicant

PR 06-JUN-1997; 97US-0048970.
XX 05-SEP-1997; 97US-0057765.
PA (HUMA-) HUMAN GENOME SCI INC.
XX Ferrie AM, Fischer CL, Gentz RL, Greene JM, Kyaw H;
PI Li Y, Li Y, Moore PA, Rosen CA, Ruben SM, Soppet DR;
PI Wei YF, Young PE, Zeng Z;
XX WPI; 1998-520811/44.
DR N-PSDB; AAV34310.
XX
XX Isolated human poly:nucleotide(s) encoding secretory peptide(s) -
PT used to develop products for the diagnosis and treatment of e.g.
PT inflammation, cancers, CNS disorders or immune system disorders
XX
XX Claim 1; Page 168-169; 201pp; English.
XX
XX This sequence represents a secreted human protein encoded by the gene
CC clone detailed in the descriptor line. The gene can be used to generate
CC fusion proteins by linking to the gene to a human immunoglobulin Fc
CC portion (e.g. AAV34277) for increasing the stability of the fused
CC protein as compared to the human protein only.
CC The invention relates to 28 novel genes and their fragments (nucleic
CC acid sequences: AAV34286-V34325; amino acid sequences AAW75196-W75235)
CC which are useful for preventing, treating or ameliorating medical
CC conditions e.g. by protein or gene therapy. Also, pathological
CC conditions can be diagnosed by determining the amount of the new
CC polypeptides in a sample or by determining the presence of mutations in
CC the new polynucleotides. Specific uses are described for each of the 28
CC polynucleotides, based on which tissues they are most highly expressed in
CC (see AAV34286 for described uses).
XX
XX Sequence 298 AA;
SQ
Query Match 99.7%; Score 1517; DB 19; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.4e-1118;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MARRSRHLLLLRLVVALGYHKAYGFSAPKQOOVTVVXYQEAAILACKTPKKTYSR 60
Db 1 MARRSRHLLLLRLVVALGYHKAYGFSAPKQOOVTVVXYQEAAILACKTPKKTYSR 60
Qy 61 LEWKLGSRVSFVYQOQLQDGFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQN 120
Db 61 LEWKLGSRVSFVYQOQLQDGFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQN 120
Qy 121 LEEDTVTLVLVAPVPSCEVPSSALSGTVVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
Db 121 LEEDTVTLVLVAPVPSCEVPSSALSGTVVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
Qy 181 LGSOSTNSSTYMTKTGTLQFNTVSKLDTGEYSCEARNVGYRCPGKRMQVDDLNTSGI 240
Db 181 LGSOSTNSSTYMTKTGTLQFNTVSKLDTGEYSCEARNVGYRCPGKRMQVDDLNTSGI 240
Qy 241 IAAVVVALVLSVGLGVCYQAKRGYFSKETSFQKSNSSSKATMTSENDFKHTKSFII 298
Db 241 IAAVVVALVLSVGLGVCYQAKRGYFSKETSFQKSNSSSKATMTSENDFKHTKSFII 298
RESULT 5
AAE26983
ID AAE26983 standard; Protein; 298 AA.
XX
AC AAE26983;
XX
XX 13-DEC-2002 (first entry)
DT
DE Human gene 25 encoded secreted protein HTEBB42, SEQ ID NO:76.
XX
XX Human; immunodeficiency; X-linked agammaglobulinemia; septic shock;
KW autoimmune disorder; rheumatoid arthritis; multiple sclerosis; cancer;
KW Grave's disease; diabetes mellitus; haematopoietic disorder; stroke;
KW

KW respiratory disorder; asthma; allergy; gastrointestinal disorder;
KW inflammatory bowel disease; neurodegenerative disorder; hepatitis;
KW Parkinson's disease; Alzheimer's disease; cardiovascular disorder;
KW atherosclerosis; myocarditis; renal disorder; fungicide; virucide;
KW hyperproliferative disorder; acute glomerulonephritis; tonsillitis;
KW respiratory disorder; rhinitis; sinusitis; neurologic disease;
KW endocrine disorder; Addison's disease; reproductive system disorder;
KW endometriosis; vasotropic; vulnery; cytostatic; nootropic; cardiant;
KW anti-HIV; tranquilliser; gout; antiparasitic.
XX
OS Homo sapiens.
XX
XX Key Location/Qualifiers
FH Peptide 1..22
FT /label= Signal_peptide
FT Protein 23..298
FT /note= "Human mature secreted protein"
FT Misc-difference 42
FT /label= Unknown
FT /note= "Encoded by GWG"
FT Misc-difference 58
FT /label= Unknown
FT /note= "Encoded by TSC"
XX
XX US2002077287-A1.
XX
XX 20-JUN-2002.
XX
XX 11-MAY-2001; 2001US-0852659.
XX
XX 11-SEP-1998; 98US-0152060.
XX
XX (RUBE/) RUBEN S M.
PA (ROSE/) ROSEN C A.
PA (LIYY/) LI Y.
PA (ZENG/) ZENG Z.
PA (KYAW/) KYAW H.
PA (FISC/) FISCHER C L.
PA (LIHH/) LI H.
PA (SOPP/) SOPPET D R.
PA (GENT/) GENTZ R L.
PA (WEIY/) WEI Y.
XX
XX Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
PI Soppet DR, Gentz RL, Wei Y, Moore PA, Young PE, Greene JM;
PI Ferrie AM;
XX
XX WPI; 2002-598780/64.
DR
DR N-PSDB; AAD44660.
XX
XX Novel human secreted polypeptides and polynucleotides for diagnosing,
PT preventing, treating immune, hyperproliferative, cardiovascular,
PT neurological, reproductive disorders and identifying modulators of
PT therapeutic use -
XX
XX Claim 11; Page 186; 209pp; English.
XX
XX AAD44636-AAD44676 represent cDNAs corresponding to 28 human secreted
CC protein genes, and AAE26959-AAE26999 represent the proteins they encode.
CC AAE27000-AAE27025 represent human secreted protein fragments or their
CC variants. The secreted proteins and genes are useful for preventing,
CC treating or ameliorating medical conditions, e.g., by protein or gene
CC therapy. Specific uses are described for each of the 28 genes, based
CC on the tissues in which they are most highly expressed and include
CC developing products for the diagnosis or treatment of immunodeficiencies,
CC e.g., X-linked agammaglobulinaemia, B cell immunodeficiencies, severe
CC combined immunodeficiencies, autoimmune disorders e.g., systemic lupus
CC erythematosus, rheumatoid arthritis, multiple sclerosis, autoimmune
CC thyroiditis, autoimmune haemolytic anaemia, Goodpasture's syndrome,
CC Grave's disease, diabetes mellitus, dermatitis, inflammatory conditions
CC including septic shock, sepsis, reperfusion injury, inflammatory bowel
CC disease, Crohn's disease, haematopoietic disorders, respiratory
CC disorders e.g., asthma and allergy, gastrointestinal disorders e.g.,

CC inflammatory bowel disease), cancers e.g., gastric, ovarian, lung,
 CC liver, bladder and breast), central nervous system (CNS) disorders e.g.,
 CC ischemic brain injury and/or stroke, neurodegenerative disorders e.g.,
 CC Parkinson's disease and Alzheimer's disease, AIDS-related dementia and
 CC prion disease, cardiovascular disorders e.g., myocarditis, arrhythmias,
 CC atherosclerosis, inflammatory disorders e.g., hepatitis, gout, trauma,
 CC pancreatitis, sarcoidosis and allogeneic transplant rejection, blood-
 CC related disorder (thrombosis, arterial thrombosis, atherosclerosis),
 CC hyperproliferative disorders, respiratory disorders e.g. rhinitis,
 CC sinusitis, tonsillitis, lung cancer, allergic disorders, pneumonitis,
 CC renal disorders. e.g. acute glomerulonephritis, neurological diseases,
 CC liver disorders, endocrine disorders e.g., hyperthyroidism, Addison's
 CC disease, hyperpituitarism, infectious diseases and reproductive system
 CC disorders e.g. endometriosis. The present sequence represents a human
 CC secreted protein of the invention.

XX Sequence 298 AA;

Query Match 99.7%; Score 1517; DB 23; Length 298;
 Best Local Similarity 100.0%; Pred. No. 1.4e-118;
 Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARRSRHRLLLRLVLLVVALGYHKAYGFSAPKDDQVVTAVYQEAAILACKTPKTVXSR 60
 DB 1 MARRSRHRLLLRLVLLVVALGYHKAYGFSAPKDDQVVTAVYQEAAILACKTPKTVXSR 60

QY 61 LEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSPSQGN 120
 DB 61 LEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSPSQGN 120

QY 121 LLEDTVTLEVLVAPVPSCEVPSSALSGTVLRCQDKGNPAPEYTFWKDGIRLLENPR 180
 DB 121 LLEDTVTLEVLVAPVPSCEVPSSALSGTVLRCQDKGNPAPEYTFWKDGIRLLENPR 180

QY 181 LGSQSTNSSTYTWNTKTGTLQFNTVSKLDTGEYSCARNVGVYRCPCGKRMQVDDNLISGI 240
 DB 181 LGSQSTNSSTYTWNTKTGTLQFNTVSKLDTGEYSCARNVGVYRCPCGKRMQVDDNLISGI 240

QY 241 IAAVVVVALVISVGLGVCAQKGVSKTSFQKSNSSSKATMTSENDFKHTKSFII 298
 DB 241 IAAVVVVALVISVGLGVCAQKGVSKTSFQKSNSSSKATMTSENDFKHTKSFII 298

RESULT 6
 ID AAE27121
 XX AAE27121 standard; Protein; 298 AA.
 AC AAE27121;
 XX
 DT 13-DEC-2002 (first entry)
 DE Human gene 25 encoded secreted protein HTEEB42, SEQ ID NO:76.
 XX
 KW Human; secreted protein; autoimmune disease; hyperproliferative disorder;
 KW rheumatoid arthritis; neoplasm; cerebrovascular disorder; angiogenesis;
 KW cerebral ischemia; cardiovascular disorder; nervous system disorder;
 KW cardiac arrest; Alzheimer's disease; ocular disorder; wound healing;
 KW infection; corneal infection; skin aging; food additive; preservative;
 KW tissue regeneration; immunosuppressive; antiproliferative; cytostatic;
 KW cardiant; vasotropic; cerebroprotective; nootropic; neuroprotective;
 KW antibacterial; virucide; fungicide; ophthalmological; gene therapy;
 KW vu.nerary.

OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Peptide 1..22
 FT /label= Signal_peptide
 FT Protein 23..298
 FT /note= "Mature human secreted protein"
 FT Misc-difference 42
 FT /label= Unknown
 FT /note= "Encoded by GWG"

FT Misc-difference 58
 FT /label= Unknown
 FT /note= "Encoded by TSC"
 XX
 PN US2002076756-A1.
 XX 20-JUN-2002.
 XX
 PF 11-MAY-2001; 2001US-0853161.
 PR 02-FEB-2001; 2001US-365583P.
 XX (RUBE/) RUBEN S M.
 PA (ROSE/) ROSEN C A.
 PA (LIYY/) LI Y.
 PA (ZENG/) ZENG Z.
 PA (KYAW/) KYAW H.
 PA (FISC/) FISCHER C L.
 PA (LIHH/) LI H.
 PA (SOPP/) SOPPET D R.
 PA (GENT/) GENTZ R L.
 PA (WEIY/) WEI Y.
 PA (MOOR/) MOORE P A.
 PA (YOUN/) YOUNG P E.
 PA (GREE/) GREENE J M.
 PA (FERR/) FERRIE A M.
 XX
 PI Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
 PI Soppet DR, Gentz RL, Wei Y, Moore PA, Young PE, Greene JM;
 PI Ferrie AM;
 XX
 DR WPI: 2002-574454/61.
 DR N-PSDB; AAD44878.
 XX
 PT New nucleic acid molecules encoding 28 human secreted proteins, useful
 PT for diagnosing, preventing, treating or ameliorating medical conditions
 PT and as food additives or preservatives -
 XX
 PS Claim 11; Page 186-187; 209pp; English.
 XX
 CC AAD44854-AAD44984 represent cDNAs corresponding to 28 human secreted
 CC protein genes, and AAE27097-AAE27137 represent the proteins they encode.
 CC AAE27138-AAE27164 represent human secreted protein fragments. The genes
 CC and their corresponding secreted proteins are useful for preventing,
 CC treating or ameliorating medical conditions, e.g., by protein or gene
 CC therapy. Secreted protein sequences of the invention are useful for the
 CC diagnosis or treatment of disorders such as autoimmune diseases (e.g.
 CC rheumatoid arthritis), hyperproliferative disorders (e.g. neoplasms of
 CC the breast or liver), cerebrovascular disorders (e.g. cerebral ischaemia,
 CC angiogenesis), cardiovascular disorders (e.g. cardiac arrest), nervous
 CC system disorders (e.g. Alzheimer's disease), infections caused by fungi,
 CC bacteria and viruses and ocular disorders (e.g. corneal infection). The
 CC polypeptides can also be used to aid wound healing and epithelial cell
 CC proliferation, to prevent skin aging due to sunburn, to maintain organs
 CC before transplantation, for supporting cell culture of primary tissues,
 CC to regenerate tissues and in chemotaxis. They can also be used as food
 CC additives or preservative to increase or decrease storage capabilities,
 CC fat content, lipid, protein, carbohydrate, vitamins, minerals, cofactors
 CC and other nutritional components. The present sequence represents a human
 CC secreted protein of the invention.

XX Sequence 298 AA;
 SX
 Query Match 99.7%; Score 1517; DB 23; Length 298;
 Best Local Similarity 100.0%; Pred. No. 1.4e-118;
 Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARRSRHRLLLRLVLLVVALGYHKAYGFSAPKDDQVVTAVYQEAAILACKTPKTVXSR 60
 DB 1 MARRSRHRLLLRLVLLVVALGYHKAYGFSAPKDDQVVTAVYQEAAILACKTPKTVXSR 60

QY 61 LEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSPSQGN 120
 DB 61 LEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSPSQGN 120

Db 61 LEWKLGSRVSFVYQOTLQDGFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQN 120
 Qy 121 LEEDTVTLVLVAPAVPSCVPSALSSTVVELRCODKEGNPAPEYTWFKDGIIRLLENPR 180
 Db 121 LEEDTVTLVLVAPAVPSCVPSALSSTVVELRCODKEGNPAPEYTWFKDGIIRLLENPR 180
 Qy 181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNVGVYRRCPCGRMQVDDLNISGI 240
 Db 181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNVGVYRRCPCGRMQVDDLNISGI 240
 Qy 241 IAAVVVALVISVCGLGVCYAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSFII 298
 Db 241 IAAVVVALVISVCGLGVCYAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSFII 298

RESULT 7

ABR47926
 ID ABR47926 standard; Protein; 298 AA.

XX ABR47926;

DT 12-JUN-2003 (first entry)

DE Human secreted protein, SEQ ID 817.

XX Cardiant; antiarrhythmic; antiarteriosclerotic; vasotropic; cytostatic;
 KW vulnery; antiinflammatory; nootropic; neuroprotective;
 KW antiparkinsonian; gene therapy; human; cardiovascular disorder.

XX Homo sapiens.

XX WO200295010-A2.

XX 28-NOV-2002.

XX 19-MAR-2002; 2002WO-US09785.

XX 21-MAR-2001; 2001US-277340P.

PR 19-JUL-2001; 2001US-306171P.

PR 13-NOV-2001; 2001US-331287P.

XX (HUMA-) HUMAN GENOME SCI INC.

XX Rosen CA, Ruben SM;

XX WPI; 2003-129429/12.

XX Novel human secreted proteins, useful for detecting, preventing,
 PT diagnosing, prognosticating, treating and/or ameliorating
 PT cardiovascular disorders such as arrhythmia -

XX Claim 13; SEQ ID 817; 1881pp; English.

XX The present invention relates to novel human secreted proteins
 CC (ABR47633-ABR48145) and their coding sequences (ACC50344-ACC50856). The
 CC proteins and their coding sequences are useful for the preparation of a
 CC diagnostic or pharmaceutical composition for diagnosing or treating a
 CC cardiovascular disorder (e.g., arrhythmia, tachycardia, cardiac arrest,
 CC coronary arteriosclerosis and myocardial ischaemia), neural disorders,
 CC immune system disorders, muscular disorders, reproductive disorders,
 CC gastrointestinal disorders, pulmonary disorders, renal disorders,
 CC proliferative disorders and/or cancerous diseases and conditions, for
 CC wound healing and epithelial cell proliferation, to treat inflammation or
 CC infection, for treating thrombosis and arteriosclerosis, for treating or
 CC preventing neural damage which occurs in neuronal disorders or
 CC neurodegenerative conditions such as Alzheimer's disease and Parkinson's
 CC disease, to enhance bone and periodontal regeneration and aid in tissue
 CC transplants or bone grafts, to prevent skin aging or hair loss, to
 CC stimulate growth and differentiation of haematopoietic cells and bone
 CC marrow cells when used in combination with other cytokines, to maintain
 CC organs before transplantation or for supporting cell culture of primary
 CC tissues, to increase or decrease differentiation or proliferation of
 CC embryonic stem cells, or to modulate mammalian characteristics or

CC metabolism.

CC Note: The sequence data for this patent was published in electronic
 CC format and is available from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences.

SQ Sequence 298 AA;

Query Match 99.7%; Score 1517; DB 24; Length 298;
 Best Local Similarity 100.0%; Pred. No. 1.4e-118;
 Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MARRSRHRLLLRLVWALGYHKAYGFSAPKDDQVVTVAVXYQEAIALACKTPKKTVYKSR 60

Db 1 MARRSRHRLLLRLVWALGYHKAYGFSAPKDDQVVTVAVXYQEAIALACKTPKKTVYKSR 60

Qy 61 LEWKLGSRVSFVYQOTLQDGFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQN 120

Db 61 LEWKLGSRVSFVYQOTLQDGFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQN 120

Qy 121 LEEDTVTLVLVAPAVPSCVPSALSSTVVELRCODKEGNPAPEYTWFKDGIIRLLENPR 180

Db 121 LEEDTVTLVLVAPAVPSCVPSALSSTVVELRCODKEGNPAPEYTWFKDGIIRLLENPR 180

Qy 181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNVGVYRRCPCGRMQVDDLNISGI 240

Db 181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNVGVYRRCPCGRMQVDDLNISGI 240

Qy 241 IAAVVVALVISVCGLGVCYAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSFII 298

Db 241 IAAVVVALVISVCGLGVCYAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSFII 298

RESULT 8

ABU64994

ID ABU64994 standard; Protein; 298 AA.

XX ABU64994;

DT 15-MAY-2003 (first entry)

DE Human secreted protein gene 25, protein.

XX Secreted protein; immunodeficiency; multiple sclerosis;

KW severe combined immunodeficiency; autoimmune disorder; cancer;

KW rheumatoid arthritis; diabetes mellitus; haematopoietic disorder;

KW inflammatory condition; septic shock; inflammatory bowel disease;

KW Crohn's disease; respiratory disorder; asthma; allergy; stroke;

KW gastrointestinal disorder; central nervous system disorder;

KW ischaemic brain injury; neurodegenerative disorder; Parkinson's disease;

KW Alzheimer's disease; cardiovascular disorder; atherosclerosis;

KW blood-related disorder; thrombosis; atherosclerosis; renal disorder;

KW hyperproliferative disorder; acute glomerulonephritis; Addison's disease;

KW endocrine disorder; liver disease; reproductive system disorder;

KW endometriosis; infectious disease; pancreatic disorder; vaccine;

KW wound repair; angiogenesis; lymphatic disorder; hair loss; body weight;

KW body height; hair colour; human.

XX Homo sapiens.

OS US2002172994-A1.

XX 21-NOV-2002.

XX 11-MAY-2001; 2001US-0852797.

XX 14-MAR-1997; 97US-040710P.

PR 14-MAR-1997; 97US-040762P.

PR 30-MAY-1997; 97US-048100P.

PR 30-MAY-1997; 97US-048189P.

PR 30-MAY-1997; 97US-048357P.

PR 30-MAY-1997; 97US-050344P.

PR 06-JUN-1997; 97US-048970P.

PR 05-SEP-1997; 97US-057765P.

CC AB271479-AB271540 represent human secreted protein genomic fragments. The
CC invention also encompasses antibodies specific for the secreted proteins,
CC the use of the secreted proteins in drug screening, and recombinant
CC vectors and host cells comprising a nucleic acid of the invention. The
CC secreted proteins, nucleic acids encoding them, antibodies or antibody
CC fragments specific for the secreted proteins, and modulators of protein
CC activity are useful for diagnosing, treating, ameliorating or preventing
CC digestive disorders. Such conditions include disorders of the mouth,
CC oesophagus, stomach, small intestine, large intestine, liver, biliary
CC tract and pancreas, and include cancers of these organs and tissues. The
CC secreted proteins and their nucleic acids may also be used in the
CC treatment of immune disorders, inflammation, infection,
CC hyperproliferative disorders, and to promote wound healing. Nucleic acids
CC of the invention may be used for chromosome identification, chromosome
CC mapping, in gene therapy, for identifying individuals from minute
CC biological samples, as hybridisation probes, and as molecular weight
CC markers. The present sequence represents a human secreted protein of the
CC invention.

XX SQ Sequence 298 AA;

Query Match 99.7%; Score 1517; DB 24; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.4e-118;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 MARRSRHRLLLRLVVALGYHKAYGFSAPKQQQVVTAVYQEAAILACKTPKKTVXSR 60
DB 1 MARRSRHRLLLRLVVALGYHKAYGFSAPKQQQVVTAVYQEAAILACKTPKKTVXSR 60
OY 61 LEWKLGSRVSFVYQOQTLOGDFKRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEQGN 120
DB 61 LEWKLGSRVSFVYQOQTLOGDFKRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEQGN 120
OY 121 LEEDTVTLVLVAPVPSCEVPSSALSGTVVELRCODKEGNPAPEYTFKDGIRLLENPR 180
DB 121 LEEDTVTLVLVAPVPSCEVPSSALSGTVVELRCODKEGNPAPEYTFKDGIRLLENPR 180
OY 181 LGSQSTNSSYTMTKTGLQFNVTSKLDTGEYSCEARNVSVYRRCGKRMQVDDLNISGI 240
DB 181 LGSQSTNSSYTMTKTGLQFNVTSKLDTGEYSCEARNVSVYRRCGKRMQVDDLNISGI 240
OY 241 IAAVVVALVISVCGLVGYCAQRKGYSKETSFKQSNSSSKATTWSEDFKHTKSFII 298
DB 241 IAAVVVALVISVCGLVGYCAQRKGYSKETSFKQSNSSSKATTWSEDFKHTKSFII 298

RESULT 10
AAO16452
ID AAO16452 standard; protein; 298 AA.
XX AAO16452;
AC AAO16452;
DT 17-APR-2003 (first entry)
DE Human junctional adhesion molecule 2 (huJAM2).

XX Human; gene therapy; extracellular region; junctional adhesion molecules;
KW huJAM; immune system disorder; immune deficiency; autoimmune disorder;
KW inflammatory disorder; cancer; wound healing; cardiovascular disease;
KW full-length membrane-bound huJAM protein.

XX Homo sapiens.

XX Key Location/Qualifiers
FH Peptide 1..28
FT /label= Signal_peptide
FT Domain 29..236
FT /note= "Extracellular domain; Specifically claimed
FT region"
FT 29..298
FT /note= "Mature huJAM2"
XX XX
PN WO2003008541-A2.

XX 30-JAN-2003.
XX PD
XX
XX PF
XX 05-JUL-2002; 2002WO-US19800.
XX
XX 16-JUL-2001; 2001US-305752P.
PR 05-FEB-2002; 2002US-354345P.
XX
XX (ELIL) LILLY & CO ELJ.
XX
XX Heuer JG, Smith RC, Su EW;
PI WPI; 2003-221848/21.
XX N-PSDB; AAL51599.
DR
XX
XX New extracellular human junctional adhesion molecule (huJAM)
PT polypeptide, useful for treating an immune system disorder such as an
PT immune deficiency or an inflammatory disorder, cancer, wound healing,
PT or a cardiovascular disease -
XX
XX Disclosure; Fig 1; 131pp; English.
XX
XX The invention comprises the DNA and protein sequences of the
CC extracellular region of human junctional adhesion molecules (huJAM). The
CC extracellular huJAM DNA and protein sequences are useful in the treatment
CC of: immune system disorders (e.g. immune deficiency); autoimmune
CC disorders; inflammatory disorders; cancer; wound healing; or a
CC cardiovascular disease. The present amino acid sequence represents the
CC full-length membrane-bound huJAM2 protein.

XX SQ Sequence 298 AA;

Query Match 99.5%; Score 1514; DB 24; Length 298;
Best Local Similarity 99.0%; Pred. No. 2.4e-118;
Matches 295; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1 MARRSRHRLLLRLVVALGYHKAYGFSAPKQQQVVTAVYQEAAILACKTPKKTVXSR 60
DB 1 MARRSRHRLLLRLVVALGYHKAYGFSAPKQQQVVTAVYQEAAILACKTPKKTVXSR 60
OY 61 LEWKLGSRVSFVYQOQTLOGDFKRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEQGN 120
DB 61 LEWKLGSRVSFVYQOQTLOGDFKRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEQGN 120
OY 121 LEEDTVTLVLVAPVPSCEVPSSALSGTVVELRCODKEGNPAPEYTFKDGIRLLENPR 180
DB 121 LEEDTVTLVLVAPVPSCEVPSSALSGTVVELRCODKEGNPAPEYTFKDGIRLLENPR 180
OY 181 LGSQSTNSSYTMTKTGLQFNVTSKLDTGEYSCEARNVSVYRRCGKRMQVDDLNISGI 240
DB 181 LGSQSTNSSYTMTKTGLQFNVTSKLDTGEYSCEARNVSVYRRCGKRMQVDDLNISGI 240
OY 241 IAAVVVALVISVCGLVGYCAQRKGYSKETSFKQSNSSSKATTWSEDFKHTKSFII 298
DB 241 IAAVVVALVISVCGLVGYCAQRKGYSKETSFKQSNSSSKATTWSEDFKHTKSFII 298

RESULT 11
AAW23693
ID AAW23693 standard; Protein; 303 AA.
XX AAW23693;
AC AAW23693;
XX
XX 12-OCT-2001 (first entry)
DT
XX
XX Human EST encoded protein SEQ ID NO: 1218.
DE
XX Human; sheep; pig; cow; fruit fly; yeast; hamster; macaque; horse;
KW tomato; monkey; dog; sea urchin; expressed sequence tag; EST;
KW diagnostics; forensic test; gene mapping; genetic disorder;
KW biodiversity; gene therapy; nutrition.
XX
XX Homo sapiens.
OS

XX WO200154477-A2.
 XX 02-AUG-2001.
 XX 25-JAN-2001; 2001WO-US02687.
 XX 25-JAN-2000; 2000US-0491404.
 PR 17-JUL-2000; 2000US-0617746.
 PR 03-AUG-2000; 2000US-0631451.
 PR 15-SEP-2000; 2000US-0663870.
 XX (HYSE-) HYSEQ INC.
 XX Tang YT, Liu C, Zhou P, Qian XB, Wang Z, Chen R, Asundi V;
 PI Cao Y, Drmanac RA, Zhang J, Werhman T;
 XX WPI; 2001-476164/51.
 DR N-PSDB; AAH98352.
 XX Isolated polypeptide for treatment of diseases, diagnostics, raising
 PT antibodies and research use -
 XX Claim 20; Page 878-879; 1275pp; English.
 XX The present invention provides the protein and coding sequences of novel
 CC proteins from a variety of organisms, including human, dog, cat, horse,
 CC cow, pig, hamster, monkey, macaque, yeast, bacteria, fruit fly, sea
 CC urchin and tomato. These were derived from expressed sequence tags (ESTs)
 CC from the organism of interest. They can be used in diagnostics,
 CC forensics, gene mapping, identification of mutations, to assess
 CC biodiversity and for nutritional purposes. The present sequence is a
 CC protein of the invention.
 XX Sequence 303 AA;
 SQ
 Query Match 98.8%; Score 1502.5; DB 22; Length 303;
 Best Local Similarity 97.4%; Pred. No. 2.3e-117;
 Matches 295; Conservative 1; Mismatches 2; Indels 5; Gaps 1;
 QY 1 MARRSRRLRLRLRLRLVVALGVHKKAYGFSAPKQDQVTVAVYQEAIALACKTPKKTVXGR 60
 Db |||||
 QY 1 MARRSRRLRLRLRLVVALGVHKKAYGFSAPKQDQVTVAVYQEAIALACKTPKKTVSSR 60
 Db |||||
 QY 61 LEWKKLGRSVFVYQOTLQGFKNRAEMIDFNIRIKNTRSDAGKYRCEVSAPSEQGN 120
 Db |||||
 QY 61 LEWKKLGRSVFVYQOTLQGFKNRAEMIDFNIRIKNTRSDAGKYRCEVSAPSEQGN 120
 Db |||||
 QY 121 LEEDTVTLVL-----VAPAVPSCVPSALSCTVVELRCQDKEGNPAPEYTFWKDGIRL 175
 Db |||||
 QY 121 LEEDTVTLVLGDVHVLAPAVPSCVPSALSCTVVELRCQDKEGNPAPEYTFWKDGIRL 180
 Db |||||
 QY 176 LENPRLGOSTNSSYTMNTKTGLQNTVSKLDTGEYSCEARNVGYRCPGKRMQVDDL 235
 Db |||||
 QY 181 LENPRLGOSTNSSYTMNTKTGLQNTVSKLDTGEYSCEARNVGYRCPGKRMQVDDL 240
 Db |||||
 QY 236 NISGIIAAVVVALVSVGLGVCAQRKGYSFKETSFOKSNSSSKATMTSENDFKHTKS 295
 Db |||||
 QY 241 NISGIIAAVVVALVSVGLGVCAQRKGYSFKETSFOKSNSSSKATMTSENDFKHTKS 300
 Db |||||
 QY 296 FII 298
 Db |||||
 QY 301 FII 303
 Db |||||
 RESULT 12
 AAY08060
 ID AAY08060 standard; Protein; 312 AA.
 XX
 AC AAY08060;
 XX
 XX 11-SEP-2000 (first entry)
 DT
 XX

DE XX Human PRO245 protein.
 KW Inflammatory cell infiltration; immune response; T cell proliferation;
 KW anti-inflammatory; anti-autoimmune; anti-diabetic; spondyloarthritis;
 KW T cell-mediated disease; spondyloarthritis; sclerosis; renal disease;
 KW inflammatory myopathy; hemolytic anemia; thrombocytopenia; thyroiditis;
 KW diabetes mellitus; demyelinating polyneuropathy; Guillain-Barre syndrome;
 KW multiple sclerosis; polyneuropathy; hepatitis; cirrhosis; enteropathy;
 KW sclerosing cholangitis; inflammatory bowel disease; Whipple's disease;
 KW skin disease; dermatitis; psoriasis; asthma; allergic rhinitis; tumor;
 KW food hypersensitivity; urticaria; eosinophilic pneumonia; transplant;
 KW idiopathic pulmonary fibrosis; graft rejection; PRO245; human.
 XX Homo sapiens.
 OS
 XX WO9914241-A2.
 PN
 XX 25-MAR-1999.
 PD
 XX 17-SEP-1998; 98WO-US19437.
 PF
 XX 17-SEP-1997; 97US-0059119.
 PR 18-SEP-1997; 97US-0059263.
 PR 28-OCT-1997; 97US-0063550.
 PR 12-NOV-1997; 97US-0065186.
 PR 21-NOV-1997; 97US-0066364.
 PR 24-NOV-1997; 97US-0066770.
 PR 04-JUN-1998; 98US-0088026.
 XX (GETH) GENENTECH INC.
 PA
 XX Fong S, Goddard A, Gurney AL, Tumas D, Wood WI;
 PI
 XX WPI; 1999-229499/19.
 DR N-PSDB; AAX37664.
 DR
 XX Composition containing novel polypeptide PRO245, its agonist or
 PT antagonist -
 XX
 PS Example 1; Fig 2; 177pp; English.
 XX
 CC This invention describes a novel composition containing (apart from a
 CC carrier or excipient), a novel PRO245 polypeptide (I), its agonist or
 CC antagonist, or their fragments, for modulating: (i) infiltration of
 CC inflammatory cells into tissue; (ii) an immune response; or (iii) T cell
 CC proliferation. The composition increases or decreases any of the effects
 CC (i)-(iii). The products of the invention have anti-inflammatory,
 CC anti-autoimmune and anti-diabetic activity. (I), and its (ant)agonists
 CC and their fragments, are used to treat immune-related diseases,
 CC particularly T cell-mediated diseases. The diseases treated include
 CC systemic lupus erythematosus, rheumatoid arthritis, juvenile chronic
 CC arthritis, spondyloarthritis, systemic sclerosis (scleroderma),
 CC idiopathic inflammatory myopathies (dermatomyositis, polymyositis),
 CC Sjogren's syndrome, systemic vasculitis, sarcoidosis, autoimmune
 CC hemolytic anemia (immune pancytopenia, paroxysmal nocturnal
 CC hemoglobinuria), autoimmune thrombocytopenia (idiopathic thrombocytopenic
 CC purpura immune-mediated thrombocytopenia), thyroiditis (Grave's disease,
 CC Hashimoto's thyroiditis, juvenile lymphocytic thyroiditis, atrophic
 CC thyroiditis), diabetes mellitus, immune-mediated renal disease
 CC (glomerulonephritis, tubulointerstitial nephritis), multiple sclerosis,
 CC idiopathic demyelinating polyneuropathy, Guillain-Barre syndrome, chronic
 CC inflammatory demyelinating polyneuropathy, infectious hepatitis
 CC (hepatitis A, B, C, D, E and other non-hepatotropic viruses), autoimmune
 CC chronic active hepatitis, primary biliary cirrhosis, granulomatous
 CC hepatitis, and sclerosing cholangitis, inflammatory bowel disease
 CC (ulcerative colitis: Crohn's disease), gluten-sensitive enteropathy, and
 CC Whipple's disease. Autoimmune or immune-mediated skin diseases including
 CC bullous skin diseases, erythema multiforme, contact dermatitis, psoriasis,
 CC asthma, allergic rhinitis, atopic dermatitis, food hypersensitivity,
 CC urticaria, eosinophilic pneumonia, idiopathic pulmonary fibrosis,
 CC hypersensitivity pneumonitis, and transplantation associated diseases
 CC (graft rejection, and graft-versus-host-disease). (I), its (ant)agonists
 CC or fragment can also be used as an adjuvant in treatment of tumors.

CC Antibodies against (I) can also be used for diagnosing such diseases.
CC This sequence represents the human PRO245 protein described in the
CC invention.
XX
SQ Sequence 312 AA;

Query Match 96.3%; Score 1465; DB 20; Length 312;
Best Local Similarity 99.3%; Pred. No. 3.2e-114;
Matches 286; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 MARRSRRLRLLLRLVVALGVHKGAFSAPKDDQVVTAAXYOEAILACKTPKKTYSR 60
DB 1 MARRSRRLRLLLRLVVALGVHKGAFSAPKDDQVVTAAXYOEAILACKTPKKTYSR 60

QY 61 LEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEOGQN 120
DB 61 LEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEOGQN 120

QY 121 LEEDTVTLVLAAPVPSCEVPSSALSGTVVLELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
DB 121 LEEDTVTLVLAAPVPSCEVPSSALSGTVVLELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

QY 181 LGSQSTNSSVTMTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPCGRMQVDDLNISGI 240
DB 181 LGSQSTNSSVTMTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPCGRMQVDDLNISGI 240

QY 241 IAAVWVVALVISVGLGVCYQAKRGYFSKETSFKQSNSSSKATTMSN 288
DB 241 IAAVWVVALVISVGLGVCYQAKRGYFSKETSFKQSNSSSKATTMSN 288

RESULT 14
AAV23324
ID AAY23324 standard; Protein; 312 AA.
AC AAY23324;
XX
DT 02-SEP-1999 (first entry)
XX
DE Amino acid sequence of protein PRO245.
XX
KW Secreted protein; transmembrane protein; human; enterocolitis;
KW Zollinger-Ellison syndrome; gastrointestinal ulceration;
KW congenital microvillus atrophy; skin disease; cell growth;
KW abnormal keratinocyte differentiation; psoriasis; epithelial cancer;
KW Parkinson's disease; Alzheimer's disease; ALS; neuropathy;
KW fibromodulin; dermal scarring; Usher Syndrome; Atrophia areata;
KW anti-thrombotic; wound healing; tissue repair.
XX
OS Homo sapiens.
XX
PN WO9914328-A2.
XX
PD 25-MAR-1999.
XX
PP 16-SEP-1998; 98WO-US19330.
XX

CC arthritis, spondyloarthropathies, systemic sclerosis, scleroderma,
CC idiopathic inflammatory myopathies, dermatomyositis, polymyositis,
CC Sjogren's syndrome, systemic vaculitis, sarcoidosis, autoimmune hemolytic
CC anemia, immune pancytopenia, paroxysmal nocturnal hemoglobinuria,
CC autoimmune thrombocytopenia, idiopathic thrombocytopenic purpura,
CC immune-mediated thrombocytopenia, lymphocytic thyroiditis, atrophic
CC Hashimoto's thyroiditis, juvenile lymphocytic thyroiditis, atrophic
CC thyroiditis, diabetes mellitus, immune-mediated renal disease,
CC glomerulonephritis, tubulointerstitial nephritis, demyelinating diseases
CC of the central and peripheral nervous systems such as multiple sclerosis,
CC idiopathic polyneuropathy, hepatobiliary diseases, infectious hepatitis
CC A, B, C, D, E, nonhepatotropic viruses, autoimmune chronic active
CC hepatitis, primary biliary cirrhosis, granulomatous hepatitis, sclerosing
CC cholangitis, inflammatory and fibrotic lung diseases, gluten-sensitive
CC enteropathy, Whipple's disease, autoimmune or immune-mediated skin
CC diseases allergic diseases of the lung such as eosinophilic pneumonias,
CC idiopathic pulmonary fibrosis and hypersensitivity pneumonitis
CC transplantation associated diseases disease. The present sequence
CC represents PRO245.
XX
SQ Sequence 312 AA;

Query Match 96.3%; Score 1465; DB 20; Length 312;
Best Local Similarity 99.3%; Pred. No. 3.2e-114;
Matches 286; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 MARRSRRLRLLLRLVVALGVHKGAFSAPKDDQVVTAAXYOEAILACKTPKKTYSR 60
DB 1 MARRSRRLRLLLRLVVALGVHKGAFSAPKDDQVVTAAXYOEAILACKTPKKTYSR 60

QY 61 LEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEOGQN 120
DB 61 LEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEOGQN 120

QY 121 LEEDTVTLVLAAPVPSCEVPSSALSGTVVLELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
DB 121 LEEDTVTLVLAAPVPSCEVPSSALSGTVVLELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

QY 181 LGSQSTNSSVTMTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPCGRMQVDDLNISGI 240
DB 181 LGSQSTNSSVTMTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPCGRMQVDDLNISGI 240

QY 241 IAAVWVVALVISVGLGVCYQAKRGYFSKETSFKQSNSSSKATTMSN 288
DB 241 IAAVWVVALVISVGLGVCYQAKRGYFSKETSFKQSNSSSKATTMSN 288

RESULT 14
AAV23354
ID AAY13354 standard; Protein; 312 AA.
AC AAY13354;
XX
DT 25-JUN-1999 (first entry)
XX
DE Amino acid sequence of protein PRO245.
XX
KW Secreted protein; transmembrane protein; human; enterocolitis;
KW Zollinger-Ellison syndrome; gastrointestinal ulceration;
KW congenital microvillus atrophy; skin disease; cell growth;
KW abnormal keratinocyte differentiation; psoriasis; epithelial cancer;
KW Parkinson's disease; Alzheimer's disease; ALS; neuropathy;
KW fibromodulin; dermal scarring; Usher Syndrome; Atrophia areata;
KW anti-thrombotic; wound healing; tissue repair.
XX
OS Homo sapiens.
XX
PN WO9914328-A2.
XX
PD 25-MAR-1999.
XX
PP 16-SEP-1998; 98WO-US19330.
XX

N-PSDB; AAC58586;

Claim 33; Fig 16; 309pp; English.

The present invention describes sixty four human PRO proteins which can be used in the treatment of immune related diseases. The human PRO proteins, anti-PRO antibodies, agonists and antagonists are useful for treating and diagnosing immune related disorders. The disorders are selected from systemic lupus erythematosus, rheumatoid arthritis, osteoarthritis, juvenile chronic arthritis, spondyloarthropathies, systemic sclerosis, idiopathic inflammatory myopathies, Sjogren's syndrome, systemic vasculitis, sarcoidosis, autoimmune haemolytic anaemia, autoimmune thrombocytopaenia, thyroiditis, diabetes mellitus and immune-mediated renal disease, demyelinating diseases of the central and peripheral nervous systems, hepatobiliary diseases, inflammatory bowel disease, gluten-sensitive enteropathy and Whipple's disease, autoimmune or immune-mediated skin diseases, allergic diseases, immunological diseases of the lung, and transplantation associated diseases including graft rejection and graft-versus-host-disease. AAC58397 to AAC58578 represent PCR primers and hybridisation probes used in the isolation of human PRO sequences. AAC58579 to AAC58642 and AAB33414 to AAB33477 represent human PRO polynucleotide and protein sequences given in the exemplification of the present invention.

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:10:36 ; Search time 15.5749 Seconds
(without alignments)
809.548 Million cell updates/sec

Title: US-09-852-797-76

Perfect score: 1521

Sequence: 1 MARRSRHRLLLRLVVA.....SSKATTMSENDFKHTKSFII 298

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 328717 seqs, 42310858 residues

Total number of hits satisfying chosen parameters: 328717

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA.*

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- 2: /cgn2_6/prodata/1/iaa/5B COMB.pcp.*
- 3: /cgn2_6/prodata/1/iaa/6A COMB.pcp.*
- 4: /cgn2_6/prodata/1/iaa/6B COMB.pcp.*
- 5: /cgn2_6/prodata/1/iaa/PCUS COMB.pcp.*
- 6: /cgn2_6/prodata/1/iaa/backfiles1.pcp.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1517	99.7	298	4	US-09-152-060-76
2	1465	96.3	312	4	US-09-254-465A-9
3	429	28.2	299	3	US-09-188-930-189
4	429	28.2	299	3	US-09-188-930-331
5	429	28.2	299	4	US-09-462-270-2
6	429	28.2	299	4	US-09-254-465A-1
7	429	28.2	299	4	US-09-312-283C-189
8	429	28.2	299	4	US-09-312-283C-331
9	421	27.7	300	4	US-09-254-465A-10
10	399	26.2	260	4	US-09-254-465A-23
11	399	26.2	263	4	US-09-254-465A-25
12	271.5	17.9	205	4	US-09-462-270-4
13	231	15.2	270	4	US-09-254-465A-24
14	231	15.2	273	4	US-09-462-270-4
15	231	15.2	319	1	US-08-597-495B-22
16	231	15.2	319	3	US-09-068-051A-22
17	231	15.2	319	4	US-09-336-536-67
18	231	15.2	319	4	US-09-254-465A-6
19	219	14.4	318	3	US-09-068-051A-32
20	210	13.8	387	4	US-09-175-928-2
21	202	13.3	390	2	US-08-979-424-1
22	201.5	13.2	394	4	US-09-336-536-39
23	200	13.1	341	4	US-09-336-536-29
24	200	13.1	370	4	US-09-336-536-28
25	196	12.9	365	4	US-09-336-536-40
26	195.5	12.9	352	4	US-09-996-243-505
27	195.5	12.9	365	2	US-08-979-424-3

28	195.5	12.9	365	3	US-09-272-496-2	Sequence 2, Appli
29	191.5	12.6	365	3	US-08-928-383B-2	Sequence 2, Appli
30	183	12.0	249	4	US-09-336-536-42	Sequence 42, Appl
31	183	12.0	365	3	US-08-928-383B-23	Sequence 23, Appl
32	183	12.0	365	3	US-08-928-383B-24	Sequence 24, Appl
33	180	11.8	365	3	US-08-928-383B-26	Sequence 26, Appl
34	178.5	11.7	246	4	US-09-336-536-31	Sequence 31, Appl
35	175.5	11.5	466	4	US-09-604-107A-8	Sequence 8, Appli
36	169.5	11.1	373	4	US-09-996-243-503	Sequence 503, App
37	161.5	10.6	442	4	US-09-778-510-20	Sequence 20, Appl
38	160.5	10.6	805	3	US-08-985-526-34	Sequence 34, Appl
39	160.5	10.6	806	2	US-08-443-861-5	Sequence 5, Appli
40	160.5	10.6	806	3	US-08-193-829B-5	Sequence 5, Appli
41	160.5	10.6	1367	1	US-07-813-593-4	Sequence 4, Appli
42	160.5	10.6	1367	1	US-07-977-451-6	Sequence 6, Appli
43	160.5	10.6	1367	1	US-07-946-507-4	Sequence 4, Appli
44	160.5	10.6	1367	1	US-08-252-517-6	Sequence 6, Appli
45	160.5	10.6	1367	1	US-07-906-397A-6	Sequence 6, Appli

ALIGNMENTS

RESULT 1
US-09-152-060-76
; Sequence 76, Application US/09152060
; Patent No. 6448230
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003P1.US
; CURRENT APPLICATION NUMBER: US/09/152,060
; CURRENT FILING DATE: 1998-09-11
; EARLIER APPLICATION NUMBER: PCT/US98/04858
; EARLIER FILING DATE: 1998-03-12
; EARLIER APPLICATION NUMBER: 60/040,762
; EARLIER FILING DATE: 1997-03-14
; EARLIER APPLICATION NUMBER: 60/040,710
; EARLIER FILING DATE: 1997-03-14
; EARLIER APPLICATION NUMBER: 60/050,934
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/048,100
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/048,357
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/048,189
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/057,765
; EARLIER FILING DATE: 1997-09-05
; EARLIER APPLICATION NUMBER: 60/048,970
; EARLIER FILING DATE: 1997-06-06
; EARLIER APPLICATION NUMBER: 60/068,368
; EARLIER FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 118
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-152-060-76

Query Match 99.7%; Score 1517; DB 4; Length 298;
Best Local Similarity 100.0%; Pred. No. 9.4e-142;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	1	MA	R	S	R	H	R	L	L	L	L	L	R	L	V	A	L	G	H	K	A	G	S	A	P	K	D	O	Q	V	T	A	X	Y	G	A	I	L	A	C	K	T	P	K	T	V	X	S	R	60								
Db	1	MA	R	S	R	H	R	L	L	L	L	L	R	L	V	A	L	G	H	K	A	G	S	A	P	K	D	O	Q	V	T	A	X	Y	G	A	I	L	A	C	K	T	P	K	T	V	X	S	R	60								
Qy	61	LE	W	K	L	G	R	S	V	S	F	Y	I	Q	T	L	G	F	K	N	A	E	M	I	D	N	I	R	I	K	N	V	T	R	S	D	A	G	K	Y	C	E	V	S	A	P	S	E	O	Q	N	120						
Db	61	LE	W	K	L	G	R	S	V	S	F	Y	I	Q	T	L	G	F	K	N	A	E	M	I	D	N	I	R	I	K	N	V	T	R	S	D	A	G	K	Y	C	E	V	S	A	P	S	E	O	Q	N	120						
Qy	121	LE	S	D	T	V	T	L	E	V	L	V	A	P	S	C	E	V	P	S	S	A	L	G	T	V	T	V	E	L	R	C	O	D	K	E	G	N	P	A	P	E	Y	T	F	W	K	D	G	I	R	L	E	N	P	R	180	
Db	121	LE	S	D	T	V	T	L	E	V	L	V	A	P	S	C	E	V	P	S	S	A	L	G	T	V	T	V	E	L	R	C	O	D	K	E	G	N	P	A	P	E	Y	T	F	W	K	D	G	I	R	L	E	N	P	R	180	
Qy	181	L	G	S	Q	S	T	N	S	S	Y	T	M	N	T	K	T	L	Q	E	N	T	V	S	K	L	D	T	G	E	V	S	C	E	A	R	N	S	V	G	Y	R	C	P	G	K	R	M	O	V	D	L	N	I	S	G	I	240
Db	181	L	G	S	Q	S	T	N	S	S	Y	T	M	N	T	K	T	L	Q	E	N	T	V	S	K	L	D	T	G	E	V	S	C	E	A	R	N	S	V	G	Y	R	C	P	G	K	R	M	O	V	D	L	N	I	S	G	I	240
Qy	241	I	A	A	V	V	V	V	V	A	L	V	I	S	V	C	G	L	G	V	C	A	O	R	K	G	F	S	K	E	T	S	F	O	K	S	N	S	S	K	A	T	T	M	S	E	N	D	F	K	H	T	K	S	F	I	I	298
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RESULT 2
 US-09-254-465A-9
 ; Sequence 9, Application US/09254465A
 ; Patent No. 6410708
 ; GENERAL INFORMATION:
 ; APPLICANT: Genentech, Inc.
 ; APPLICANT: Ashkenazi, Avi J.
 ; APPLICANT: Fong, Sherman
 ; APPLICANT: Goddard, Audrey
 ; APPLICANT: Gurney, Austin L.
 ; APPLICANT: Napier, Mary A.
 ; APPLICANT: Tumas, Daniel
 ; APPLICANT: Wood, William I.
 ; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
 ; OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
 ; FILE REFERENCE: P1216R1(US)
 ; CURRENT APPLICATION NUMBER: US/09/254,465A
 ; PRIOR FILING DATE: 1999-03-05
 ; PRIOR APPLICATION NUMBER: PCT/US98/24855
 ; PRIOR FILING DATE: 1998-11-20
 ; PRIOR APPLICATION NUMBER: US 60/066,364
 ; PRIOR FILING DATE: 1997-11-21
 ; PRIOR APPLICATION NUMBER: US 60/078,936
 ; PRIOR FILING DATE: 1998-03-20
 ; PRIOR APPLICATION NUMBER: PCT/US98/19437
 ; PRIOR FILING DATE: 1998-09-17
 ; NUMBER OF SEQ ID NOS: 30
 ; SEQ ID NO 9
 ; LENGTH: 312
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-09-254-465A-9

Qy	241 IAAVVVALVTSVCGLGVCYAQRKGYSFKETSPQKSNSSSKATTMSEN 288
Db	241 IAAVVVALVTSVCGLGVCYAQRKGYSFKETSPQKSNSSSKATTMSEN 288

RESULT 3
US-09-188-930-189
; Sequence 189, Application US/09188930A
; Patent No. 6150502
; GENERAL INFORMATION:
; APPLICANT: Watson, James D.
; APPLICANT: Strachan, Lorna
; APPLICANT: Sleeman, Matthew
; APPLICANT: Onrust, Rene
; APPLICANT: Murison, James Greg
; TITLE OF INVENTION: Compositions Isolated From Skin Cells

RESULT 4
US-09-188-930-331
; Sequence 331, Application US/09188930A
; Patent No. 6150502
; GENERAL INFORMATION:
; APPLICANT: Watson, James D.
; APPLICANT: Strachan, Lorna
; APPLICANT: Sleeman, Matthew
; APPLICANT: Onrust, Rene
; APPLICANT: Muirson, James Greg

Db 127 LVPPSKPCGIEGTEIIGNNIQLTCSKESGPTQYSWKRYNILNQEQLAQPASGPVS 186
QY 191 TMTTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCP-GKRMQVDDLNIS-----GIIA 242
Db 187 LKNISTDT-----SGYICTSSNEEGTQFCNITVAVRSPSMNVALVYGVIAVGVA 236
QY 243 AVVVVALVISVC 254
Db 237 ALIIIGIIYYC 248

RESULT 15

US-08-597-495B-22
; Sequence 22, Application US/08597495B
; Patent No. 5712369
; GENERAL INFORMATION:
; APPLICANT: Old, Lloyd J.; Welt, Sydney; Ritter, Gerd;
; APPLICANT: Simpson, Richard J.; Nice, Edouard; Moritz, R. L.;
; APPLICANT: Catimel, B.; Ji, Hong; Burgess, Anthony W.;
; APPLICANT: Heath, Joan K.; White, Sara J.; Johnstone, Cameron
; TITLE OF INVENTION: Colon Cell And Colon Cancer Cell
; TITLE OF INVENTION: Associated Nucleic Acid Molecules, Protein And Peptides
; NUMBER OF SEQUENCES: 29
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Felfe & Lynch
; STREET: 805 Third Avenue
; CITY: New York City
; STATE: New York
; COUNTRY: USA
; ZIP: 10022
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.5 inch, 360 kb storage
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: PC-DOS
; SOFTWARE: Wordperfect
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/597.495B
; FILING DATE: 02-Feb-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/511,876
; FILING DATE: 04-Aug-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Hanson, No. 5712369man D.
; REGISTRATION NUMBER: 30,946
; REFERENCE/DOCKET NUMBER: LUD 5316.1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 688-9200
; TELEFAX: (212) 838-3884
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 319 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
US-08-597-495B-22

Query Match 15.2%; Score 231; DB 1; Length 319;
Best Local Similarity 28.6%; Pred. No. 1.1e-14;
Matches 72; Conservative 41; Mismatches 97; Indels 42; Gaps 11;
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Db 23 SVETPDVLRASQGSVTLPC-TVHTSTSSREGLIQWDKLLTHTERVVWPFNKNYIH 81
QY 81 GD-FKNR-----AEMIDFNIRIKNVTSDAGKYRCEVSAPSGQGNLEEDT---VTLEV 130
Db 82 GELYKRVVISNNAEOSDASITIDQLTMDNMGTYECSVLSMD-----LEGNTKSRVRLV 137
QY 131 LVAPVPSCEVPSSALSGTVVELRCQDKGNPAPEYTWFKDGIRLLENPLGSGQSTNSSY 190
Db 138 LVPPSKPCGIEGTEIIGNNIQLTCSKESGPTQYSWKRYNILNQEQLAQPASGPVS 197

QY 191 TMTTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCP-GKRMQVDDLNIS-----GIIA 242
Db 198 LKNISTDT-----SGYICTSSNEEGTQFCNITVAVRSPSMNVALVYGVIAVGVA 247
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Db 248 ALIIIGIIYYC 259
Search completed: December 9, 2003, 17:14:23.
Job time : 17.5749 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:13:07 ; Search time 27.5157 Seconds
(without alignments)
2014.238 Million cell updates/sec

Title: US-09-852-797-76

Perfect score: 1521

Sequence: 1 MARRSRRLRLRLRLVLA.....SSKATTSSEDFKHTKSFII 298

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 684280 seqs, 185983659 residues

Total number of hits satisfying chosen parameters: 684280

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA:

- 1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
- 2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
- 3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
- 4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep.*
- 5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep.*
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- 12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
- 13: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep.*
- 14: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep.*
- 15: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep.*
- 16: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
- 17: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
- 18: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1518	99.8	298	9	US-09-745-763-38
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4	1518	99.8	298	16	US-10-192-791-2
5	1517	99.7	298	9	US-09-853-161-76
6	1517	99.7	298	9	US-09-852-659A-76
7	1517	99.7	298	10	US-09-852-797-76
8	1465	96.3	312	10	US-09-909-320-64
9	1465	96.3	312	10	US-09-909-088B-64
10	1465	96.3	312	10	US-09-905-291A-64
11	1465	96.3	312	10	US-09-953-499-9
12	1465	96.3	312	10	US-09-902-853-64
13	1465	96.3	312	10	US-09-907-824-64
14	1465	96.3	312	10	US-09-907-841-64
15	1465	96.3	312	11	US-09-904-011-64

16	1465	96.3	312	11	US-09-906-742-64
17	1465	96.3	312	11	US-09-906-838-64
18	1465	96.3	312	11	US-09-907-613-64
19	1465	96.3	312	11	US-09-907-942-64
20	1465	96.3	312	11	US-09-904-859-64
21	1465	96.3	312	11	US-09-909-204-64
22	1465	96.3	312	11	US-09-904-820-64
23	1465	96.3	312	11	US-09-904-786-64
24	1465	96.3	312	11	US-09-906-646-64
25	1465	96.3	312	11	US-09-906-700-64
26	1465	96.3	312	11	US-09-903-786-64
27	1465	96.3	312	11	US-09-902-903-64
28	1465	96.3	312	11	US-09-903-749A-64
29	1465	96.3	312	11	US-09-904-119-64
30	1465	96.3	312	11	US-09-904-956-64
31	1465	96.3	312	11	US-09-902-736-64
32	1465	96.3	312	11	US-09-907-794-64
33	1465	96.3	312	11	US-09-903-943-64
34	1465	96.3	312	11	US-09-904-462-64
35	1465	96.3	312	11	US-09-907-925-64
36	1465	96.3	312	11	US-09-902-692-64
37	1465	96.3	312	11	US-09-903-520-64
38	1465	96.3	312	11	US-09-905-056-64
39	1465	96.3	312	11	US-09-909-064-64
40	1465	96.3	312	11	US-09-904-553-64
41	1465	96.3	312	11	US-09-905-381-64
42	1465	96.3	312	11	US-09-905-088-64
43	1465	96.3	312	11	US-09-907-575-64
44	1465	96.3	312	11	US-09-905-075-64
45	1465	96.3	312	11	US-09-902-759-64

ALIGNMENTS

RESULT 1

US-09-745-763-38
; Sequence 38, Application US/09745763
; Patent No. US20020065394A1
; GENERAL INFORMATION:

APPLICANT: Jacobs, Kenneth
McCoy, John M.
LaVallie, Edward R.
Collins-Racie, Lisa A.
Evans, Cheryl
Merberg, David
Treacy, Maurice
Spaulding, Vikki

TITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES

NUMBER OF SEQUENCES: 219

CORRESPONDENCE ADDRESS: ENCODING THEM

ADDRESSEE: Genetics Institute, Inc.

STREET: 87 CambridgePark Drive

CITY: Cambridge

STATE: MA

COUNTRY: U.S.A.

ZIP: 02140

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/745,763

FILING DATE: 18-Jun-2000

CLASSIFICATION: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: Sprunger, Suzanne A.

REGISTRATION NUMBER: 41,323

TELECOMMUNICATION INFORMATION:

TELEPHONE: (617) 498-8284

TELEFAX: (617) 876-5851

; INFORMATION FOR SEQ ID NO: 38:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 298 amino acids
; TYPE: amino acid
; STRANDEDNESS: <Unknown>
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 38:
US-09-745-763-38

Query Match 99.8%; Score 1518; DB 9; Length 298;
Best Local Similarity 99.3%; Pred. No. 9.8e-136;
Matches 296; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 MARRSRHRLLLRLVLLVVALGYHKAQFSAKQDQVVTAVYQEAAILACKTPKKTVXSR 60
Db 1 MARRSRHRLLLRLVLLVVALGYHKAQFSAKQDQVVTAVYQEAAILACKTPKKTVSSR 60

QY 61 LEWKKLGRSVFVYQQTLLQGDQFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQGN 120
Db 61 LEWKKLGRSVFVYQQTLLQGDQFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQGN 120

QY 121 LBEEDTVTLVAVAPVSPCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
Db 121 LBEEDTVTLVAVAPVSPCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

QY 181 LGSQSTNSSTYNTKGTLLQFNTVSKLDTGEVSCSEARNVGYRRCPGKMQVDDNLNISI 240
Db 181 LGSQSTNSSTYNTKGTLLQFNTVSKLDTGEVSCSEARNVGYRRCPGKMQVDDNLNISI 240

QY 241 IAAVVVVALVISVCGLGVCYAQRKGYSKTSFKQSNSSSKATTMTSENDFKHTKSFII 298
Db 241 IAAVVVVALVISVCGLGVCYAQRKGYSKTSFKQSNSSSKATTMTSENDFKHTKSFII 298

RESULT 2
US-09-799-777-30
; Sequence 30, Application US/09799777
; Patent No. US20020091244A1
; GENERAL INFORMATION:
; APPLICANT: Lal, Preeti
; Hillman, Jennifer L.
; Corley, Neil C.
; Guegler, Karl J.
; Baugh, Mariah
; Sather, Susan
; Shah, Purvi

TITLE OF INVENTION: HUMAN SIGNAL PEPTIDE-CONTAINING PROTEINS
NUMBER OF SEQUENCES: 154
CORRESPONDENCE ADDRESS:
ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
STREET: 3174 PORTER DRIVE
CITY: PALO ALTO
STATE: CALIFORNIA
COUNTRY: USA
ZIP: 94304

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/799,777
FILING DATE: 06-Mar-2001
CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/002,485
FILING DATE: <Unknown>

ATTORNEY/AGENT INFORMATION:
NAME: BILLINGS, LUCY J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0459 US

TELECOMMUNICATION INFORMATION:

; TELEPHONE: (650) 855-0555
; TELEFAX: (650) 845-4166
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 298 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; IMMEDIATE SOURCE:
; LIBRARY: DUODNOT02
; CLONE: 1704050
; SEQUENCE DESCRIPTION: SEQ ID NO: 30 :
US-09-799-777-30

Query Match 99.8%; Score 1518; DB 9; Length 298;
Best Local Similarity 99.3%; Pred. No. 9.8e-136;
Matches 296; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 MARRSRHRLLLRLVLLVVALGYHKAQFSAKQDQVVTAVYQEAAILACKTPKKTVXSR 60
Db 1 MARRSRHRLLLRLVLLVVALGYHKAQFSAKQDQVVTAVYQEAAILACKTPKKTVSSR 60

QY 61 LEWKKLGRSVFVYQQTLLQGDQFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQGN 120
Db 61 LEWKKLGRSVFVYQQTLLQGDQFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQGN 120

QY 121 LBEEDTVTLVAVAPVSPCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
Db 121 LBEEDTVTLVAVAPVSPCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

QY 181 LGSQSTNSSTYNTKGTLLQFNTVSKLDTGEVSCSEARNVGYRRCPGKMQVDDNLNISI 240
Db 181 LGSQSTNSSTYNTKGTLLQFNTVSKLDTGEVSCSEARNVGYRRCPGKMQVDDNLNISI 240

QY 241 IAAVVVVALVISVCGLGVCYAQRKGYSKTSFKQSNSSSKATTMTSENDFKHTKSFII 298
Db 241 IAAVVVVALVISVCGLGVCYAQRKGYSKTSFKQSNSSSKATTMTSENDFKHTKSFII 298

RESULT 3
US-10-139-849-2
; Sequence 2, Application US/10139849
; Publication No. US20030079238A1
; GENERAL INFORMATION:
; APPLICANT: Cunningham, Sonia
; Barros, Maria Pia

TITLE OF INVENTION: A POLYNUCLEOTIDE ENCODING A HUMAN
JUNCTIONAL ADHESION PROTEIN (JAM 2)

NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Rockey, Milnamow & Katz, Ltd.
STREET: 180 N. Stetson Avenue, 2 Prudential Plaza,
Suite 4700
CITY: Chicago
STATE: IL
COUNTRY: U.S.A.
ZIP: 60601

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/139,849
FILING DATE: 07-May-2002
CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/643,929
FILING DATE: 23-Aug-2000

ATTORNEY/AGENT INFORMATION:
NAME: Katz, Martin L.
REGISTRATION NUMBER: 25,011

TELECOMMUNICATION INFORMATION:

TELEPHONE: 312-616-5400
TELEFAX: 312-616-5460
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 298 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-10-139-849-2

Query Match 99.8%; Score 1518; DB 15; Length 298;
Best Local Similarity 99.3%; Pred. No. 9.8e-136;
Matches 296; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 MARRSRHRLLLLRLLVVALGYHKAQYGFSAKQDQVVTAVYQEAAILACKTPKKTYSR 60
Db 1 MARRSRHRLLLLRLLVVALGYHKAQYGFSAKQDQVVTAVYQEAAILACKTPKKTYSR 60
Qy 61 LEWKLGSRVSFVYVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOGQN 120
Db 61 LEWKLGSRVSFVYVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOGQN 120
Qy 121 LEEDTTLVLVAPVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
Db 121 LEEDTTLVLVAPVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
Qy 181 LGSQSTNSSTMTKTGTLQFNVTSLKDTGEYSCARNVGYRRCPCGKRMQVDDLNISGI 240
Db 181 LGSQSTNSSTMTKTGTLQFNVTSLKDTGEYSCARNVGYRRCPCGKRMQVDDLNISGI 240
Qy 241 IAAVVVVALVSVCGLVGYAQRKGYSKTSFQKSNSSSKATTMSNDFKHTKSFII 298
Db 241 IAAVVVVALVSVCGLVGYAQRKGYSKTSFQKSNSSSKATTMSNDFKHTKSFII 298

RESULT 4
US-10-192-791-2
Sequence 2, Application US/10192791
Publication No. US20030130166A1
GENERAL INFORMATION:
APPLICANT: Texas Biotechnology Corporation
TITLE OF INVENTION: A Polynucleotide Encoding a Human Junctional Adhesion Protein (JA
FILE REFERENCE: TEX4542P0430
CURRENT APPLICATION NUMBER: US/10/192,791
CURRENT FILING DATE: 2003-12-10
NUMBER OF SEQ ID NOS: 10
SOFTWARE: PatentIn version 3.1
SEQ ID NO 2
LENGTH: 298
TYPE: PRT
ORGANISM: Homo sapiens
US-10-192-791-2

Query Match 99.8%; Score 1518; DB 16; Length 298;
Best Local Similarity 99.3%; Pred. No. 9.8e-136;
Matches 296; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 MARRSRHRLLLLRLLVVALGYHKAQYGFSAKQDQVVTAVYQEAAILACKTPKKTYSR 60
Db 1 MARRSRHRLLLLRLLVVALGYHKAQYGFSAKQDQVVTAVYQEAAILACKTPKKTYSR 60
Qy 61 LEWKLGSRVSFVYVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOGQN 120
Db 61 LEWKLGSRVSFVYVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOGQN 120
Qy 121 LEEDTTLVLVAPVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
Db 121 LEEDTTLVLVAPVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
Qy 181 LGSQSTNSSTMTKTGTLQFNVTSLKDTGEYSCARNVGYRRCPCGKRMQVDDLNISGI 240
Db 181 LGSQSTNSSTMTKTGTLQFNVTSLKDTGEYSCARNVGYRRCPCGKRMQVDDLNISGI 240

Qy 241 IAAVVVVALVSVCGLVGYAQRKGYSKTSFQKSNSSSKATTMSNDFKHTKSFII 298
Db 241 IAAVVVVALVSVCGLVGYAQRKGYSKTSFQKSNSSSKATTMSNDFKHTKSFII 298

RESULT 5
US-09-853-161-76
Sequence 76, Application US/09853161
Patent No. US20020076756A1
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: 28 Human Secreted Proteins
FILE REFERENCE: PZ003P3
CURRENT APPLICATION NUMBER: US/09/853,161
CURRENT FILING DATE: 2001-05-11
PRIOR APPLICATION NUMBER: 60/265,583
PRIOR FILING DATE: 2001-02-02
PRIOR APPLICATION NUMBER: 09/152,060
PRIOR FILING DATE: 1998-09-11
PRIOR APPLICATION NUMBER: PCT/US98/04858
PRIOR FILING DATE: 1998-03-12
PRIOR APPLICATION NUMBER: 60/040,762
PRIOR FILING DATE: 1997-03-14
PRIOR APPLICATION NUMBER: 60/040,710
PRIOR FILING DATE: 1997-03-14
PRIOR APPLICATION NUMBER: 60/050,934
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/048,100
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/048,357
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/048,189
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/057,765
PRIOR FILING DATE: 1997-09-05
PRIOR APPLICATION NUMBER: 60/048,970
PRIOR FILING DATE: 1997-06-06
PRIOR APPLICATION NUMBER: 60/068,368
PRIOR FILING DATE: 1997-12-19
NUMBER OF SEQ ID NOS: 118
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 76
LENGTH: 298
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SITE
LOCATION: (42)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (58)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-853-161-76

Query Match 99.7%; Score 1517; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.2e-135;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MARRSRHRLLLLRLLVVALGYHKAQYGFSAKQDQVVTAVYQEAAILACKTPKKTYSR 60
Db 1 MARRSRHRLLLLRLLVVALGYHKAQYGFSAKQDQVVTAVYQEAAILACKTPKKTYSR 60
Qy 61 LEWKLGSRVSFVYVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOGQN 120
Db 61 LEWKLGSRVSFVYVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOGQN 120
Qy 121 LEEDTTLVLVAPVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
Db 121 LEEDTTLVLVAPVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
Qy 181 LGSQSTNSSTMTKTGTLQFNVTSLKDTGEYSCARNVGYRRCPCGKRMQVDDLNISGI 240

Db 181 LGSQSTNSSYTWNTKGTTLQFNTVSKLDTGEYSCEARNVGVYRRCPCGKRMQVDDLNI SGI 240
QY 241 IAAVVVVALVISVCGGLGVCYAQRKGYSKETSFKQKSNSSSKATMTSENFKHTKSFII 298
Db 241 IAAVVVVALVISVCGGLGVCYAQRKGYSKETSFKQKSNSSSKATMTSENFKHTKSFII 298

RESULT 6

US-09-852-659A-76
; Sequence 76, Application US/09852659A
; Patent No. US20020077287A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; CURRENT APPLICATION NUMBER: US/09/852,659A
; FILE REFERENCE: P2003P4
; CURRENT FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/265,583
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 09/152,060
; PRIOR FILING DATE: 1998-09-11
; PRIOR APPLICATION NUMBER: PCT/US98/04858
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/040,762
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/040,710
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/050,934
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,100
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,357
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,189
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/057,765
; PRIOR FILING DATE: 1997-09-05
; PRIOR APPLICATION NUMBER: 60/048,970
; PRIOR FILING DATE: 1997-06-06
; PRIOR APPLICATION NUMBER: 60/068,368
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 121
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-852-659A-76

Query Match 99.7%; Score 1517; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.2e-135;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARRSRHLLLLRLYLVALGYHKAYGFSAPKDDQVVTVXVQBAIACKTPKKTVXSR 60
Db 1 MARRSRHLLLLRLYLVALGYHKAYGFSAPKDDQVVTVXVQBAIACKTPKKTVXSR 60
QY 61 LEWKLGSRVSFVYVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYCEVSAPSEQQN 120
Db 61 LEWKLGSRVSFVYVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYCEVSAPSEQQN 120
QY 121 LEEDTVTLVLVAPVPSCVPSALSCTVVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
Db 121 LEEDTVTLVLVAPVPSCVPSALSCTVVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

QY 181 LGSQSTNSSYTWNTKGTTLQFNTVSKLDTGEYSCEARNVGVYRRCPCGKRMQVDDLNI SGI 240
Db 181 LGSQSTNSSYTWNTKGTTLQFNTVSKLDTGEYSCEARNVGVYRRCPCGKRMQVDDLNI SGI 240
QY 241 IAAVVVVALVISVCGGLGVCYAQRKGYSKETSFKQKSNSSSKATMTSENFKHTKSFII 298
Db 241 IAAVVVVALVISVCGGLGVCYAQRKGYSKETSFKQKSNSSSKATMTSENFKHTKSFII 298

RESULT 7

US-09-852-797-76
; Sequence 76, Application US/09852797
; Patent No. US20020172994A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003P2
; CURRENT APPLICATION NUMBER: US/09/852,797
; CURRENT FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/265,583
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 09/152,060
; PRIOR FILING DATE: 1998-09-11
; PRIOR APPLICATION NUMBER: PCT/US98/04858
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/040,762
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/040,710
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/050,934
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,100
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,357
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,189
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/057,765
; PRIOR FILING DATE: 1997-09-05
; PRIOR APPLICATION NUMBER: 60/048,970
; PRIOR FILING DATE: 1997-06-06
; PRIOR APPLICATION NUMBER: 60/068,368
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 118
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-852-797-76

Query Match 99.7%; Score 1517; DB 10; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.2e-135;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARRSRHLLLLRLYLVALGYHKAYGFSAPKDDQVVTVXVQBAIACKTPKKTVXSR 60
Db 1 MARRSRHLLLLRLYLVALGYHKAYGFSAPKDDQVVTVXVQBAIACKTPKKTVXSR 60
QY 61 LEWKLGSRVSFVYVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYCEVSAPSEQQN 120
Db 61 LEWKLGSRVSFVYVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYCEVSAPSEQQN 120
QY 121 LEEDTVTLVLVAPVPSCVPSALSCTVVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
Db 121 LEEDTVTLVLVAPVPSCVPSALSCTVVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy 181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDLINISGI 240
Db 181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDLINISGI 240
Qy 241 IAAVVVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSNDPFKHTKSFII 298
Db 241 IAAVVVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSNDPFKHTKSFII 298

RESULT 8

US-09-309-320-64
; Sequence 64, Application US/09909320
; Patent No. US20020132240A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnovers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kijavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/909,320
; PRIOR FILING DATE: 2002-01-04
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16

; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-909-320-64
Query Match 96.3%; Score 1465; DB 10; Length 312;
Best Local Similarity 99.3%; Pred. No. 1.le-130;
Matches 286; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1 MARRSRHRLLLRLRYLVWALGYHKAYGFSAPKDDQVVTAVYQEAAILACKTPKKTVXSR 60
Db 1 MARRSRHRLLLRLRYLVWALGYHKAYGFSAPKDDQVVTAVYQEAAILACKTPKKTVSSR 60
Qy 61 LEWKKLGSRVSFVYVYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQN 120
Db 61 LEWKKLGSRVSFVYVYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQN 120
Qy 121 LEEDTVTLEVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
Db 121 LEEDTVTLEVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
Qy 181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDLINISGI 240
Db 181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDLINISGI 240
Qy 241 IAAVVVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSN 288
Db 241 IAAVVVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSN 288

RESULT 9

US-09-909-088B-64
; Sequence 64, Application US/09909088B
; Patent No. US20020146709A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnovers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kijavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/909,088B
; CURRENT FILING DATE: 2001-07-18

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; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-909-088B-64

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Query Match      96.3%; Score 1465; DB 10; Length 312;
Best Local Similarity 99.3%; Pred. No. 1.le-130;
Matches 286; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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Qy 1 MARRSRHLLLLRLVVALGYHKAYGFSAPKQQVVAVYQEAAILACKTPKKTVXSR 60
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Db 1 MARRSRHLLLLRLVVALGYHKAYGFSAPKQQVVAVYQEAAILACKTPKKTVSSR 60
   |||||||

Qy 61 LEWKLGSRVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQN 120
   |||||||
Db 61 LEWKLGSRVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQN 120
   |||||||

Qy 121 LEEDTVTLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
   |||||||
Db 121 LEEDTVTLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
   |||||||

Qy 181 LGSOSTNSVTMTKTGTLOQNTVSKLDTGYSCAARNVGYRRCPCGKRMQVDDINTSGI 240
   |||||||
Db 181 LGSOSTNSVTMTKTGTLOQNTVSKLDTGYSCAARNVGYRRCPCGKRMQVDDINTSGI 240
   |||||||

Qy 241 IAAVVVVVALVTSVGLGVCAQRKGYFSKTSFQKSNSSSKATTMSEN 288
   |||||||
Db 241 IAAVVVVVALVTSVGLGVCAQRKGYFSKTSFQKSNSSSKATTMSEN 288
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RESULT 10

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US-09-905-291A-64
; Sequence 64, Application US/09905291A
; Patent No. US20020160374A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi

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Query Match      96.3%; Score 1465; DB 10; Length 312;
Best Local Similarity 99.3%; Pred. No. 1.le-130;
Matches 286; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/905,291A
; PRIOR FILING DATE: 2001-07-12
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-905-291A-64

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Qy 1 MARSRHRLLLRLYLVALGYHAYGFSAPKDDQVVTVAVXYQEAIALACKTPKKTVXSR 60
Db 1 MARSRHRLLLRLYLVALGYHAYGFSAPKDDQVVTVAVXYQEAIALACKTPKKTVSSR 60
Qy 61 LEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOGQN 120
Db 61 LEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOGQN 120
Qy 121 LEEDTDTLVAVAPVPSCEVPSSALSGTVVLELRCQDEKGNPAPEYTWFKDGIRLLENPR 180
Db 121 LEEDTDTLVAVAPVPSCEVPSSALSGTVVLELRCQDEKGNPAPEYTWFKDGIRLLENPR 180
Qy 181 LGSQSTSSYTMNTKTGTLOFNTVSKLDTGYSCEARNVSVYRRCPCGKRMQVDDLNTSGI 240
Db 181 LGSQSTSSYTMNTKTGTLOFNTVSKLDTGYSCEARNVSVYRRCPCGKRMQVDDLNTSGI 240
Qy 241 IAAVVVALVSVCGLVGYCAQRKGYSFKETSFOKSNSSSKATTMSN 288
Db 241 IAAVVVALVSVCGLVGYCAQRKGYSFKETSFOKSNSSSKATTMSN 288

RESULT 11

US-09-953-499-9
; Sequence 9, Application US/09953499
; Publication No. US20020182206A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; TITLE OF INVENTION: OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
; FILE REFERENCE: P121GRI (US)
; CURRENT APPLICATION NUMBER: US/09/953,499
; CURRENT FILING DATE: 2001-09-14
; PRIOR FILING DATE: 1999-03-05
; PRIOR FILING DATE: 1998-11-20
; PRIOR FILING DATE: 1997-11-21
; PRIOR FILING DATE: 1998-03-20
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 9
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-953-499-9

Query Match 96.3%; Score 1465; DB 10; Length 312;
Best Local Similarity 99.3%; Pred. No. 1.1e-130;
Matches 286; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 MARSRHRLLLRLYLVALGYHAYGFSAPKDDQVVTVAVXYQEAIALACKTPKKTVXSR 60
Db 1 MARSRHRLLLRLYLVALGYHAYGFSAPKDDQVVTVAVXYQEAIALACKTPKKTVSSR 60
Qy 61 LEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOGQN 120
Db 61 LEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOGQN 120
Qy 121 LEEDTDTLVAVAPVPSCEVPSSALSGTVVLELRCQDEKGNPAPEYTWFKDGIRLLENPR 180
Db 121 LEEDTDTLVAVAPVPSCEVPSSALSGTVVLELRCQDEKGNPAPEYTWFKDGIRLLENPR 180
Qy 181 LGSQSTSSYTMNTKTGTLOFNTVSKLDTGYSCEARNVSVYRRCPCGKRMQVDDLNTSGI 240

Db 181 LGSQSTSSYTMNTKTGTLOFNTVSKLDTGYSCEARNVSVYRRCPCGKRMQVDDLNTSGI 240
Qy 241 IAAVVVALVSVCGLVGYCAQRKGYSFKETSFOKSNSSSKATTMSN 288
Db 241 IAAVVVALVSVCGLVGYCAQRKGYSFKETSFOKSNSSSKATTMSN 288

RESULT 12

US-09-902-853-64
; Sequence 64, Application US/09902853
; Publication No. US20020192659A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnovers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Geritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/902,853
; CURRENT FILING DATE: 2001-07-10
; PRIOR APPLICATION NUMBER: US/09/665,350
; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20

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; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-902-853-64

Query Match          96.3%; Score 1465; DB 10; Length 312;
Best Local Similarity 99.3%; Pred. No. 1.1e-130;
Matches 286; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 MARRSRHRLLLRLYLVALGYHKAYGFSAPKQOOVTVAVYQEAAILACKTPKKTYSR 60
Db 1 MARRSRHRLLLRLYLVALGYHKAYGFSAPKQOOVTVAVYQEAAILACKTPKKTYSR 60

Qy 61 LEWKLGSRVSFVYQOTLQDGFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQON 120
Db 61 LEWKLGSRVSFVYQOTLQDGFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQON 120

Qy 121 LEEDTTLVLVAPVPSCVPSSALSGTVVELRCQDKEGNPAPETWFKDGIRLLENPR 180
Db 121 LEEDTTLVLVAPVPSCVPSSALSGTVVELRCQDKEGNPAPETWFKDGIRLLENPR 180

Qy 181 LGSQSTNSSTYMTNTKGTGLQFNVTSLKDTGEYSCARNVGYRRCPGKRMQVDDLNISGI 240
Db 181 LGSQSTNSSTYMTNTKGTGLQFNVTSLKDTGEYSCARNVGYRRCPGKRMQVDDLNISGI 240

Qy 241 IAAVVVALVISVCGLVGYAQRKGYSKTSFKQSNSSSKATTMSN 288
Db 241 IAAVVVALVISVCGLVGYAQRKGYSKTSFKQSNSSSKATTMSN 288
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RESULT 13
US-09-907-824-64
; Sequence 64, Application US/09907824
; Publication No. US20020197671A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnovers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kijavon, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/907,824
; PRIOR FILING DATE: 2001-07-17
; PRIOR APPLICATION NUMBER: 09/665,350
; PRIOR FILING DATE: 2000-09-18
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; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-907-824-64

Query Match          96.3%; Score 1465; DB 10; Length 312;
Best Local Similarity 99.3%; Pred. No. 1.1e-130;
Matches 286; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 MARRSRHRLLLRLYLVALGYHKAYGFSAPKQOOVTVAVYQEAAILACKTPKKTYSR 60
Db 1 MARRSRHRLLLRLYLVALGYHKAYGFSAPKQOOVTVAVYQEAAILACKTPKKTYSR 60

Qy 61 LEWKLGSRVSFVYQOTLQDGFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQON 120
Db 61 LEWKLGSRVSFVYQOTLQDGFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQON 120

Qy 121 LEEDTTLVLVAPVPSCVPSSALSGTVVELRCQDKEGNPAPETWFKDGIRLLENPR 180
Db 121 LEEDTTLVLVAPVPSCVPSSALSGTVVELRCQDKEGNPAPETWFKDGIRLLENPR 180

Qy 181 LGSQSTNSSTYMTNTKGTGLQFNVTSLKDTGEYSCARNVGYRRCPGKRMQVDDLNISGI 240
Db 181 LGSQSTNSSTYMTNTKGTGLQFNVTSLKDTGEYSCARNVGYRRCPGKRMQVDDLNISGI 240

Qy 241 IAAVVVALVISVCGLVGYAQRKGYSKTSFKQSNSSSKATTMSN 288
Db 241 IAAVVVALVISVCGLVGYAQRKGYSKTSFKQSNSSSKATTMSN 288

RESULT 14
US-09-907-841-64
; Sequence 64, Application US/09907841
; Publication No. US20020198366A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
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; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/907,841
; PRIOR FILING DATE: 2001-11-20
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-11-29
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-907-841-64

Query Match      96.3%; Score 1465; DB 10; Length 312;
Best Local Similarity 99.3%; Pred. No. 1.1e-130;
Matches 286; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      1  MARRSRHRLLLRLYLVLVVALGYHKAQKQVVTAVYQEAIALACKTPKTKVXSR 60
Db      1  MARRSRHRLLLRLYLVLVVALGYHKAQKQVVTAVYQEAIALACKTPKTKVSSR 60
Qy      61  LEWKLGSRVSFVYQOTLQDFKNRAEMIDFNIRKNVTRSDAGKYRCEVSAPSEGOQN 120
Db      61  LEWKLGSRVSFVYQOTLQDFKNRAEMIDFNIRKNVTRSDAGKYRCEVSAPSEGOQN 120
Qy      121  LEEDTIVTLVAPVAPVSCVPSSALSGTVELRCQDKEGNPAPEYTWFKDGRLLLENPR 180
Db      121  LEEDTIVTLVAPVAPVSCVPSSALSGTVELRCQDKEGNPAPEYTWFKDGRLLLENPR 180
Qy      181  LGSQSTNSSYTMNTKGTGLQFNTVSKLDTGCEARNVGVYRRCPCGKMQVDDLNI 240

; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/904,011
; PRIOR FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: 09/665,350
; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-12-02
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/904,011
; PRIOR FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: 09/665,350
; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
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; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-904-011-64

Query Match      96.3%; Score 1465; DB 11; Length 312;
Best Local Similarity 99.3%; Pred. No. 1.1e-130;
Matches 286; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      1 MARRSRHRLLLLLLRYLVVVALGYHKAYGFSAPKDDQOVTVAVYQEAAILACKTPKKTVXSR 60
Db      1 MARRSRHRLLLLLLRYLVVVALGYHKAYGFSAPKDDQOVTVAVYQEAAILACKTPKKTVSSR 60

Qy      61 LEWKKLGRSVSFYVYQQTLLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQON 120
Db      61 LEWKKLGRSVSFYVYQQTLLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQON 120

Qy      121 LEEDTVTLEVLVAPVPSCEVPSSALSGTVVELRCQDKEGNAPEYTWFKDGIIRLLENPR 180
Db      121 LEEDTVTLEVLVAPVPSCEVPSSALSGTVVELRCQDKEGNAPEYTWFKDGIIRLLENPR 180

Qy      181 LGSQSTNSSYTNWTKTGLTFQNTVSKLDTGEYSCEARNVGYRRCPCGKMQVDDDLNISGI 240
Db      181 LGSQSTNSSYTNWTKTGLTFQNTVSKLDTGEYSCEARNVGYRRCPCGKMQVDDDLNISGI 240

Qy      241 IAAVVVVALVISVCGLVGYAQRKGYSKETSFKSNSSSKATTWSEN 288
Db      241 IAAVVVVALVISVCGLVGYAQRKGYSKETSFKSNSSSKATTWSEN 288
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Search completed: December 9, 2003, 17:22:01
Job time : 29.5157 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:09:51 ; Search time 15.0557 Seconds
(without alignments)
1903.477 Million cell updates/sec

Title: US-09-852-797-76

Perfect score: 1521

Sequence: 1 MARRSRRLRLRLRLVLA.....SSKATTSEDFKTKSFII 298

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 283308 seqs, 96168682 residues

Total number of hits satisfying chosen parameters: 283308

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

PIR_76:*

1: pir1:*

2: pir2:*

3: pir3:*

4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	429	28.2	299	S56749	junctional adhesio
2	201.5	13.2	365	JC7780	coxsackie- and ade
3	186	12.2	811	A41054	fasciclin II, tran
4	186	12.2	873	B41054	protein UNC-89 - C
5	171	11.2	6642	T29757	elastic titin - hu
6	163.5	10.7	7962	I38346	protein-tyrosine k
7	160.5	10.6	1367	A41228	nonspecific cross-
8	157	10.3	344	A27681	ErbB kinase activa
9	157	10.3	860	JC5702	ErbB kinase activa
10	157	10.3	868	JC5701	leukocyte antigen-
11	156	10.3	1897	TDHULK	hypothetical prote
12	155.5	10.2	1328	T23007	hypothetical prote
13	155.5	10.2	2783	T34416	neural cell adhesi
14	155	10.2	725	JC0100	ErbB kinase activa
15	155	10.2	850	JC5700	biliary glycoprote
16	153.5	10.1	521	JC1508	hypothetical prote
17	152	10.0	773	T46283	hemecentin precurs
18	152	10.0	5175	T20992	neural cell adhesi
19	152	10.0	5198	T43290	protein-tyrosine-p
20	151.5	10.0	1033	S19247	leukocyte antigen-
21	151	9.9	1092	1 JN0635	biliary glycoprote
22	151	9.9	1501	2 I58148	protein-tyrosine-p
23	151	9.9	1863	2 S46217	hypothetical prote
24	151	9.9	1898	2 S46216	cell adhesion prot
25	150.5	9.9	521	2 S43338	neural cell adhesi
26	150	9.9	1499	2 I50212	protein-tyrosine-p
27	150	9.9	1907	2 S50893	hypothetical prote
28	149.5	9.8	352	2 T33433	ecto-ATPase precu
29	148.5	9.8	519	2 A44783	

RESULT 1

S56749

junctional adhesion molecule precursor - human

N:Alternate names: FII platelet antigen; platelet adhesion molecule PAM-1; platelet FII

C:Species: Homo sapiens (man)

C>Date: 27-Oct-1995 #sequence_revision 01-Feb-2002 #text_change 01-Feb-2002

C:Accession: A59406; S56749

R:Ozaki, H.; Ishii, K.; Horiuchi, H.; Arai, H.; Kawamoto, T.; Okawa, K.; Iwamatsu, A.; J. Immunol. 163, 553-557, 1999

A:Title: Cutting edge: combined treatment of TNF-alpha and IFN-gamma causes redistribut:

A:Reference number: A59406; MUID:99323940; PMID:10395639

A:Status: preliminary

A:Molecule type: DNA

A:Residues: 1-299 <OZA>

A:Cross-references: GB:AAD42050; NID:G5326797; PIDN:AAD42050.1

R:Naik, U.P.; Ehrlich, Y.H.; Kornecki, E. Biochem. J. 310, 155-162, 1995

A:Title: Mechanisms of platelet activation by a stimulatory antibody: cross-linking of

A:Reference number: S56749; MUID:95374438; PMID:7646439

A:Accession: S56749

A:Molecule type: protein

A:Residues: 28-49, 'X', 51-53; 62-73, 'E', 75-103; 123, 'F', 125-130, 'FQDKXTIYLNXY'; 'LT', 206, 'X'

A:Note: the order of the peptides other than the amino terminus was not determined

C:Genetics: JAM

C:Keywords: glycoprotein; phosphoprotein; platelet aggregation; platelet membrane

F:1-25/Domain: signal sequence #status predicted <SIG>

F:26-299/Product: junctional adhesion molecule #status predicted <MAT>

Query Match 28.2%; Score 429; DB 2; Length 299;

Best Local Similarity 34.2%; Pred. No. 5.2e-27;

Matches 106; Conservative 50; Mismatches 126; Indels 28; Gaps 8;

QY 2 ARSRHRLRLRLRLVVALGVHKA YGFA-----PKDQVTVAVXQEA ILACTPKK 55

Db 5 AQVERKLLCLFILA ILCSALG SVTHSSEPRIPENNPVKLS CAYS----GFSSP-- 58

QY 56 TVKSLRLEW-KLGRSVSVFYVYQTLQGD FKNRAEMIDFNIRIKNVTRES DAGKYRCVSAP 114

Db 59 ----RVENKFDQGDTR LVCYNKKTASTYEDNRVTLPTGITFKSVTRDTGYTCMVS-- 112

QY 115 SEQGNLEEDVT LVLVAPVPSCEVPSSALSGTVLRLCQDKENGAPEYTFWFGDIR 174

Db 113 EBGNGSYGVEKVLIVLPSPKPTNIPSSAIGNRAVLTCSEQDGSFSEYTFWFGDIV 172

QY 175 LLENPLRSGQSTNSYTMNTKTGTQFN TVSKLDGCEVSCARNVGVYRCPGK-RMQVD 233

Db 173 MFTNPKSTRAFNSNSYVLNPTTGELVFDPLSADTGCEVSCARNGYGTPTMTSNAVRMEAV 232

QY 234 DLNIGSIIAAVVVVALVIVSCVLGVCYQKCYAKYFESKETSFKNSSSSKA-----TTMSEN 288

Db 234 DLNIGSIIAAVVVVALVIVSCVLGVCYQKCYAKYFESKETSFKNSSSSKA-----TTMSEN 288

QY 234 DLNIGSIIAAVVVVALVIVSCVLGVCYQKCYAKYFESKETSFKNSSSSKA-----TTMSEN 288

Db 234 DLNIGSIIAAVVVVALVIVSCVLGVCYQKCYAKYFESKETSFKNSSSSKA-----TTMSEN 288

QY 234 DLNIGSIIAAVVVVALVIVSCVLGVCYQKCYAKYFESKETSFKNSSSSKA-----TTMSEN 288

Db 234 DLNIGSIIAAVVVVALVIVSCVLGVCYQKCYAKYFESKETSFKNSSSSKA-----TTMSEN 288

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Db 233 ERNVGVIAAALVTLILLGILVFGWFPAYSRGHFDR-----KKGTSSKKVIYQPSARSEG 289
Qy 289 DPKTKSFII 298
Db 290 EFKQTSSFLV 299

RESULT 2
JC7780
coxackie- and adenovirus receptor - bovine
C;Species: Bos primigenius taurus (cattle)
C;Date: 02-Apr-2002 #sequence_revision 02-Apr-2002 #text_change 02-Apr-2002
C;Accession: JC7780
R;Thoenen, I.; Keyaerts, E.; Lindberg, M.; Van Ranst, M.
Biochem. Biophys. Res. Commun. 288, 805-808, 2001
A;Title: Characterization of a cDNA encoding the bovine coxsackie and adenovirus receptor
A;Reference number: JC7780
A;Contents: Liver
A;Accession: JC7780
A;Molecule type: mRNA
A;Residues: 1-365 <THO>
A;Cross-references: GB:AY033651
C;Comment: This protein serves as the primary adenoviral attachment site on bovine cells

Query Match 13.2%; Score 201.5; DB 2; Length 365;
Best Local Similarity 24.5%; Pred. No. 1.2e-08;
Matches 78; Conservative 46; Mismatches 130; Indels 65; Gaps 11;

Qy 12 LLRLYLVALGYHAYGFSAPKQDVVAVYQVAVYQVAILACK-----TPKTVXSRLEW----- 63
Db 3 LLRLFLLCGVADVFTRLGSLITTPQMIETAKAGETAYLPCKFTLGPDLIDWLILSPA 62
Qy 64 --KKL-----GRSVSFVYQQTLOGDFKNRAEMI-----DFNIRIKNVTRSDAGK 106
Db 63 DNQKVDQVILYSGDKIYDYQ-----DLKGRVHFTSNLKSQDASINVTNLQSLDIGT 117
Qy 107 YRCEV-SAPSEQQNLEEDVTLEVLVAVAPVCEPSSALSGLTVVLRQDKEGNPAPE 165
Db 118 YQCKVKKAPGVGNKKIQ-----LTVLVKPSGIRCYVDGSEIGNDFKLKCEPKESLPLR 172
Qy 166 YTFKDGIRLLENPRLGQSQNSYSYNTWTKTGLQFTNTVSKLDTGEYSCARNSVGYRR 225
Db 173 YEWQK-----LSDSKPLTSWLPMTSPVISVKNASAEYSGTYTCTVRNRVGSQDC 223
Qy 226 -----PKRMQVDDLNTSGIIAAVVVALVISVGLGVCAQRKGYFSKETSFO--- 274
Db 224 LLRLDVVPPSNRAGTTAGAVIGTLALVLIALIVFCCH-----KKRREEKYEVHHDIRE 279
Qy 275 -----KSNSSSKATTMSN 288
Db 280 DVPPPKSRTSARSYIGSN 298

RESULT 3
A41054
fasciclin II, transmembrane splice form precursor - fruit fly (Drosophila melanogaster)
C;Species: Drosophila melanogaster
C;Date: 21-Apr-1992 #sequence_revision 21-Apr-1992 #text_change 17-Mar-2000
C;Accession: A41054
R;Grenningloh, G.; Rehms, E.J.; Goodman, C.S.
Cell 67, 45-57, 1991
A;Title: Genetic analysis of growth cone guidance in Drosophila: fasciclin II functions
A;Reference number: A41054; MUID:92005695; PMID:1913818
A;Accession: A41054
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-811 <GRE>
A;Cross-references: GB:M77165; NID:g157402; PID:g157403
C;Genetics:
C;Gene: FlyBase:Fab2
A;Cross-references: FlyBase:FBgn0000635
A;Superfamily: neural cell adhesion molecule; fibronectin type III repeat homology; immu
C;Keywords: membrane protein

Db 233 ERNVGVIAAALVTLILLGILVFGWFPAYSRGHFDR-----KKGTSSKKVIYQPSARSEG 289
Qy 289 DPKTKSFII 298
Db 290 EFKQTSSFLV 299

RESULT 2
JC7780
coxackie- and adenovirus receptor - bovine
C;Species: Bos primigenius taurus (cattle)
C;Date: 02-Apr-2002 #sequence_revision 02-Apr-2002 #text_change 02-Apr-2002
C;Accession: JC7780
R;Thoenen, I.; Keyaerts, E.; Lindberg, M.; Van Ranst, M.
Biochem. Biophys. Res. Commun. 288, 805-808, 2001
A;Title: Characterization of a cDNA encoding the bovine coxsackie and adenovirus receptor
A;Reference number: JC7780
A;Contents: Liver
A;Accession: JC7780
A;Molecule type: mRNA
A;Residues: 1-365 <THO>
A;Cross-references: GB:AY033651
C;Comment: This protein serves as the primary adenoviral attachment site on bovine cells

Query Match 13.2%; Score 201.5; DB 2; Length 365;
Best Local Similarity 24.5%; Pred. No. 1.2e-08;
Matches 78; Conservative 46; Mismatches 130; Indels 65; Gaps 11;

Qy 12 LLRLYLVALGYHAYGFSAPKQDVVAVYQVAVYQVAILACK-----TPKTVXSRLEW----- 63
Db 3 LLRLFLLCGVADVFTRLGSLITTPQMIETAKAGETAYLPCKFTLGPDLIDWLILSPA 62
Qy 64 --KKL-----GRSVSFVYQQTLOGDFKNRAEMI-----DFNIRIKNVTRSDAGK 106
Db 63 DNQKVDQVILYSGDKIYDYQ-----DLKGRVHFTSNLKSQDASINVTNLQSLDIGT 117
Qy 107 YRCEV-SAPSEQQNLEEDVTLEVLVAVAPVCEPSSALSGLTVVLRQDKEGNPAPE 165
Db 118 YQCKVKKAPGVGNKKIQ-----LTVLVKPSGIRCYVDGSEIGNDFKLKCEPKESLPLR 172
Qy 166 YTFKDGIRLLENPRLGQSQNSYSYNTWTKTGLQFTNTVSKLDTGEYSCARNSVGYRR 225
Db 173 YEWQK-----LSDSKPLTSWLPMTSPVISVKNASAEYSGTYTCTVRNRVGSQDC 223
Qy 226 -----PKRMQVDDLNTSGIIAAVVVALVISVGLGVCAQRKGYFSKETSFO--- 274
Db 224 LLRLDVVPPSNRAGTTAGAVIGTLALVLIALIVFCCH-----KKRREEKYEVHHDIRE 279
Qy 275 -----KSNSSSKATTMSN 288
Db 280 DVPPPKSRTSARSYIGSN 298

RESULT 3
A41054
fasciclin II, transmembrane splice form precursor - fruit fly (Drosophila melanogaster)
C;Species: Drosophila melanogaster
C;Date: 21-Apr-1992 #sequence_revision 21-Apr-1992 #text_change 17-Mar-2000
C;Accession: A41054
R;Grenningloh, G.; Rehms, E.J.; Goodman, C.S.
Cell 67, 45-57, 1991
A;Title: Genetic analysis of growth cone guidance in Drosophila: fasciclin II functions
A;Reference number: A41054; MUID:92005695; PMID:1913818
A;Accession: A41054
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-811 <GRE>
A;Cross-references: GB:M77165; NID:g157402; PID:g157403
C;Genetics:
C;Gene: FlyBase:Fab2
A;Cross-references: FlyBase:FBgn0000635
A;Superfamily: neural cell adhesion molecule; fibronectin type III repeat homology; immu
C;Keywords: membrane protein
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Query Match 12.2%; Score 186; DB 2; Length 811;
Best Local Similarity 24.6%; Pred. No. 5.5e-07;
Matches 67; Conservative 50; Mismatches 101; Indels 54; Gaps 13;

Qy 30 SAPKDDQVVTAVYQVAILACKT---PKKTVXSRLEWKKLG---RSVSFVYQQTLOGDF 83
Db 142 NAPENQYPTLG---QDYVVMCEVKADPNPTI---DMLRNGDPIRTNDKYVYQT----- 189
Qy 84 KNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQNLEEDVTLEVLVAVAPVCEVPS 143
Db 190 -----NGLLRNVQESDEGIYTCR-AAVIETGELLER-TIRVEVFIQPEIISLPTNL 239
Qy 144 SALSGLTVVLRQDKEGNPAPEYTFKDGIRLLENPRLGQSQNSYSYNTWTKTGLQFNT 203
Db 240 EAVEGKPPFAANCTAR-GKVPFISWIRDATQL-----NVATADRFPQNPQGLVTTISS 291
Qy 204 VSKLDTGEYSCARNSVGYRRCPGK-----RMQVDDL-NISGIIAAVVVALVISVGLG 257
Db 292 VSQDDYGYTYTCLAKNRAGVVDQTKLVLRPQIYELVYNTVGARTKEIAI----- 341
Qy 258 VCYAQRKGYFSKETSFOKSNSSSKATTMSND 289
Db 342 TCRA--KGRPAPAITFRRWGTQEEYTNQOQDD 371

RESULT 4
B41054
fasciclin II pi-linked splice form precursor - fruit fly (Drosophila melanogaster)
C;Species: Drosophila melanogaster
C;Date: 21-Apr-1992 #sequence_revision 21-Apr-1992 #text_change 17-Mar-2000
C;Accession: B41054
R;Grenningloh, G.; Rehms, E.J.; Goodman, C.S.
Cell 67, 45-57, 1991
A;Title: Genetic analysis of growth cone guidance in Drosophila: fasciclin II functions
A;Reference number: A41054; MUID:92005695; PMID:1913818
A;Accession: B41054
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-873 <GRE>
A;Cross-references: GB:M77166
C;Genetics:
C;Gene: FlyBase:Fab2
A;Cross-references: FlyBase:FBgn0000635
A;Superfamily: neural cell adhesion molecule; fibronectin type III repeat homology; immu
C;Keywords: transmembrane protein

Query Match 12.2%; Score 186; DB 2; Length 873;
Best Local Similarity 24.6%; Pred. No. 6e-07;
Matches 67; Conservative 50; Mismatches 101; Indels 54; Gaps 13;

Qy 30 SAPKDDQVVTAVYQVAILACKT---PKKTVXSRLEWKKLG---RSVSFVYQQTLOGDF 83
Db 142 NAPENQYPTLG---QDYVVMCEVKADPNPTI---DMLRNGDPIRTNDKYVYQT----- 189
Qy 84 KNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQNLEEDVTLEVLVAVAPVCEVPS 143
Db 190 -----NGLLRNVQESDEGIYTCR-AAVIETGELLER-TIRVEVFIQPEIISLPTNL 239
Qy 144 SALSGLTVVLRQDKEGNPAPEYTFKDGIRLLENPRLGQSQNSYSYNTWTKTGLQFNT 203
Db 240 EAVEGKPPFAANCTAR-GKVPFISWIRDATQL-----NVATADRFPQNPQGLVTTISS 291
Qy 204 VSKLDTGEYSCARNSVGYRRCPGK-----RMQVDDL-NISGIIAAVVVALVISVGLG 257
Db 292 VSQDDYGYTYTCLAKNRAGVVDQTKLVLRPQIYELVYNTVGARTKEIAI----- 341
Qy 258 VCYAQRKGYFSKETSFOKSNSSSKATTMSND 289
Db 342 TCRA--KGRPAPAITFRRWGTQEEYTNQOQDD 371
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RESULT 5

QY 155 QDKEGNPAPEYTWFKDIRLLENPRLGQSQTSSSYTMNTKTGTQLQFNVTVSKLDTGXYSC 214
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Db 2765 CQ-VAGTPEITVSVMYGDKTLRPTPEYRTYTNN-----VATLVFKNVINDSGEYTC 2816

QY 215 EARNISVG 221
| | | | | : | | | | | : | | | | | : | | | | | : | | | | |
Db 2817 KAENSIG 2823

RESULT 7
A41228 protein-tyrosine kinase (EC 2.7.1.112) Flk-1 precursor, endothelial cell-specific recep
C:Species: Mus musculus (house mouse)
C>Date: 19-Jun-1992 #sequence revision 19-Jun-1992 #text_change 04-Feb-2000
C:Accession: A41228; A46065; I58365; S18832; S25991
R:Matthews, W.; Jordan, C.T.; Gavin, M.; Jenkins, N.A.; Copeland, N.G.; Lemischka, I.R.
Proc. Natl. Acad. Sci. U.S.A. 88, 9028-9030, 1991
A>Title: A receptor tyrosine kinase cDNA isolated from a population of enriched primitiv
A:Reference number: A41228; MUID:92020984; PMID:1717995
A:Accession: A41228
A>Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-1367 <BAT>
A:Cross-references: GB:X59397; NID:g50976; PIDN:CAA42040.1; PID:g50977
R:Millauer, B.; Witzigmann-Voos, S.; Schunrich, H.; Martinez, R.; Moller, N.P.; Risau, W.
Cell 72, 835-846, 1993
A>Title: High affinity VEGF binding and developmental expression suggest Flk-1 as a maj
A:Reference number: A46065; MUID:93208880; PMID:7691362
A:Accession: A46065
A>Status: preliminary; not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-24, 'T', 26-782, 'VL', 785-916, 'C', 918-1367 <MIL>
A:Cross-references: GB:X70842; NID:g57923; PIDN:CAA50192.1; PID:g57924
A>Note: submitted to the EMBL Data Library, January 1993
R:Note: sequence extracted from NCBI backbone (NCBIP:128064)
R:Oelrichs, R.B.; Reid, H.H.; Bernard, O.; Ziemlecki, A.; Wilks, A.F.
Oncogene 8, 11-18, 1993
A>Title: NYK/FLK-1: a putative receptor protein tyrosine kinase isolated from E10 embry
A:Reference number: I58365; MUID:93141255; PMID:8423988
A:Accession: I58365
A>Status: preliminary; translated from GB/EMBL/DDBB
A:Molecule type: mRNA
A:Residues: 1-678, 'D', 680-1340, 'RSPPV'
A:Cross-references: GB:S53103; NID:g264004; PIDN:AAB25043.1; PID:g264005
C:Genetics:
A:Gene: FLK-1; NYK
C:Superfamily: unassigned Ser/Thr or Tyr-specific protein kinases; protein kinase homol
C:Keywords: ATP; autophosphorylation; phosphoprotein; phosphotransferase; transmembrane
F:830-1165/Domain: protein kinase homology <KIN>
F:838-846/Region: protein kinase ATP-binding motif

Query Match 10.6%; Score 160.5; DB 2; Length 1367;
Best Local Similarity 24.8%; Pred. No. 0.00011;
Matches 53; Conservative 23; Mismatches 75; Indels 63; Gaps 6;

QY 44 QEAILACKTPKTVXSRLEWKKLRGSVFYYQOTLQGDFKNRAEMIDFN----- 93
| | | | | : | | | | | : | | | | | : | | | | | : | | | | |
Db 562 QESVSLCTADRNFTNFNLTWYKLGSQATSVMHGESLTVPCKNLDALWLKNGTFMSNSTND 621

QY 94 ---IRIKNVTRSDAGKYRC-----EVSAPSQCNLEEDVTVLEV 130
| | | | | : | | | | | : | | | | | : | | | | | : | | | | |
Db 622 ILIVAFQNASLDQGDYVCSAQDKTKKRHLVKQIILLERMAPMITG-NLENQTTTI-- 678

QY 131 LVAPAVPSCVEFPSSALLSGTGVVELRCQDEGNPAPEYTWFKDGIRLLENPRLGQSQTSSSY 190
| | | | | : | | | | | : | | | | | : | | | | | : | | | | |
Db 679 -----GETIEVTC-PASGNPTPHITWFKDNETLVDSGIULRDGNRL 720

QY 191 TWNTKTGTGLQFNVTVSKLDTGXYSCARNISVGYYR 224
| | | | | : | | | | | : | | | | | : | | | | | : | | | | |
Db 721 TI-----RRVRKEDGGLYTCQACNVLCAR 745

RESULT 8

A27681
non-specific cross-reacting antigen precursor - human
N:Alternate names: NCA; TEX/NCA
C:Species: Homo sapiens (man)
C:Date: 31-Mar-1989 #sequence revision 16-Sep-1992 #text change 31-Jan-2000
C:Accession: A26902; A29875; A27681; B31037; A29918; A27709; A36271; C26414; A44476; F44476
R:Oikawa, S.; Kosaki, G.; Nakazato, H.
Biochem. Biophys. Res. Commun. 146, 464-469, 1987
A:Title: Molecular cloning of a gene for a member of carcinoembryonic antigen (CEA) gene
A:Reference number: A26902; MUID:87298464; PMID:3619891
A:Accession: A26902
A:Molecule type: DNA
A:Residues: 1-141 <OIK>
A:CROSS-references: GB:M17082; NID:q180230; PIDN:AAA51971.1; PID:g553222
R:Thompson, J.A.; Pandi, H.; Paxton, R.J.; Shively, L.; Padma, A.; Simmer, R.L.; Todd, C.
Proc. Natl. Acad. Sci. U.S.A. 84, 2965-2969, 1987
A:Title: Molecular cloning of a gene belonging to the carcinoembryonic antigen gene family
A:Reference number: A29875; MUID:87204248; PMID:3033672
A:Accession: A29875
A:Molecule type: DNA
A:Residues: 23-141 <THO>
A:CROSS-references: GB:M16337
A:Note: the authors translated the codon ACT for residue 64 as Tyr
R:Tawaragi, Y.; Oikawa, S.; Matsuo, Y.; Kosaki, G.; Nakazato, H.
Biochem. Biophys. Res. Commun. 150, 89-96, 1988
A:Title: Primary structure of non-specific cross-reacting antigen (NCA), a member of carcinoembryonic antigen family
A:Reference number: A27681; MUID:88106638; PMID:3337731
A:Accession: A27681
A:Molecule type: mRNA
A:Residues: 1-238, 'V', 240-344 <TAW>
A:CROSS-references: GB:M18728; NID:q189084; PIDN:AAA59907.1; PID:g189085
R:Barrett, T.; Goebel, S.J.; Nothdurft, M.A.; Elting, J.J.
Genomics 3, 59-66, 1988
A:Title: Carcinoembryonic antigen family: characterization of cDNAs coding for NCA and CEA
A:Reference number: A31037; MUID:89122014; PMID:3220478
A:Accession: B31037
A:Molecule type: mRNA
A:Residues: 1-137, 'L', 139-344 <BAR>
A:CROSS-references: GB:M29541; NID:q189103; PIDN:AAA59915.1; PID:g189104
A:Note: the authors translated the codon TTG for residue 138 as Phe
R:Neumaier, M.; Zimmermann, W.; Shively, L.; Hinoda, Y.; Riggs, A.D.; Shively, J.E.
J. Biol. Chem. 263, 3202-3207, 1988
A:Title: Characterization of a cDNA clone for the non-specific cross-reacting antigen (NCA)
A:Reference number: A29918; MUID:88139389; PMID:2830274
A:Accession: A29918
A:Molecule type: mRNA
A:Residues: 1-344 <NEU>
A:CROSS-references: GB:M18216; GB:J03550; NID:q178690; PIDN:AAA51739.1; PID:g178691
R:Grunert, P.; Kolbinger, F.; Schwarz, K.; Schwaiblmair, H.; von Kleist, S.
Biochem. Biophys. Res. Commun. 153, 1105-1115, 1988
A:Title: Protein analysis of NCA-50 shows identity to NCA cDNA deduced sequences and indicates a novel protein
A:Reference number: A27709; MUID:88268882; PMID:3390172
A:Accession: A27709
A:Molecule type: protein
A:Residues: 35-95; 99-120; 123-138; 149-151, 'X', 153-162; 166, 'X', 168-172, 'X', 174-193; 231-235
R:Hefta, S.A.; Paxton, R.J.; Shively, J.E.
J. Biol. Chem. 265, 8618-8626, 1990
A:Title: Sequence and glycosylation site identity of two distinct glycoforms of non-specific cross-reacting antigen
A:Reference number: A36271; MUID:90256782; PMID:2341397
A:Accession: A36271
A:Molecule type: protein
A:Residues: 35-42; 44-53; 55-80; 83-134; 139-160; 166-172; 174-180; 191-194, 204-224; 233-308; 310-314
R:Paxton, R.J.; Mosser, G.; Pande, H.; Lee, T.D.; Shively, J.E.
Proc. Natl. Acad. Sci. U.S.A. 84, 920-924, 1987
A:Title: Sequence analysis of carcinoembryonic antigen: identification of glycosylation sites
A:Reference number: A26414; MUID:87147209; PMID:3469650
A:Accession: C26414
A:Molecule type: protein
A:Residues: 35-69 <PAX>
R:Khan, W.N.; Fraengemyr, L.; Teglund, S.; Israelsson, A.; Bremer, K.; Hammarstrom, S.
Genomics 14, 384-390, 1992
A:Title: Identification of three new genes and estimation of the size of the carcinoembryonic antigen gene family

A:Reference number: A44476; MUID:93052339; PMID:1427854
A:Accession: E44476
A:Status: preliminary; not compared with conceptual translation
A:Molecule type: DNA
A:Residues: 35-141 <KEA>
A:Accession: F44476
A:Status: preliminary; not compared with conceptual translation
A:Molecule type: DNA
A:Residues: 35-137, 'L', 139-141 <KH2>
A:Comment: This protein appears to be processed at the carboxyl terminus and anchored to the membrane
C:Genetics:
A:Gene: GDB:NCA
A:CROSS-references: GDB:120221; OMIM:163980
A:Map position: 19q13.2-19q13.2
A:Introns: 22/1
A:Note: the list of introns may be incomplete
C:Superfamily: carcinoembryonic antigen; carcinoembryonic antigen precursor amino-terminal
C:Keywords: blocked carboxyl end; glycoprotein; lipoprotein; membrane protein; phosphatidylcholine
F:1-138/Domain: carcinoembryonic antigen precursor amino-terminal homology <CEAN>
F:1-34/Domain: signal sequence #status predicted <SIG>
F:35-320/Product: non-specific cross-reacting antigen #status experimental <MAT>
F:160-217/Domain: immunoglobulin homology <IMM1>
F:252-301/Domain: immunoglobulin homology <IMM2>
F:321-344/Domain: carboxyl-terminal propeptide #status predicted <CTP>
F:104, 111, 115, 152, 173, 197, 224, 256-274, 288, 292/Binding site: carbohydrate (Asn) (covalent)
F:309/Binding site: carbohydrate (Asn) (covalent) #status predicted
F:320/Modified site: GPI-anchor ethanolamine amide carboxyl end (Gly) (in mature for processing)

Query Match 10.3%; Score 157; DB 2; Length 344;
Best Local Similarity 28.4%; Pred. No. 4.2e-05;
Matches 48; Conservative 25; Mismatches 62; Indels 34; Gaps 8;
QY 91 DFNTRIKVTRSDAGKYRCEVSAPSEQQNLLEEDTVTLVLVAPVPCPEVPSSA--LSG 148
DB 197 NMTLLSVKRNDSAGECEIQNPASNRSS---DPVTLLNVLVYGPDPGPTIS-PSKANYRPG 252
QY 149 TVVELRCQDKGNPAEYTFKDFGRLLENPRLSQSTSSVTMTKTGTGLQFNVTSKLD 208
DB 253 ENLNLSCS-AASNPPAQYSWFNG-----TFQOSTQELFIPNITVNN 293
QY 209 TGEYSCEARNVGYRRCPG-KRMQVDDLNISG---ITAAVVVVVALVIVS 253
DB 294 SGSYMCAHNS-----ATGLNRTVTMTVSSGAPVLSAVATVGITIGV 337

RESULT 9
JC5702
Erbb kinase activator alpha2a, brain and thymus - rat
C:Species: Rattus norvegicus (Norway rat)
C:Date: 25-Nov-1997 #sequence_revision 25-Nov-1997 #text_change 08-Sep-2002
C:Accession: JC5702; PC4417
R:Higashiyama, S.; Horikawa, M.; Yamada, K.; Ichino, N.; Nakano, N.; Nakagawa, T.; Miya, J. Biochem. 122, 675-680, 1997
A:Title: A novel brain-derived member of the epidermal growth factor family that interacts with erbB-2
A:Reference number: JC5700; MUID:98006324; PMID:9348101
A:Accession: JC5702
A:Status: nucleic acid sequence not shown
A:Molecule type: mRNA
A:Residues: 1-860 <HTG>
A:CROSS-references: DDBJ:D89996; NID:g2605631; PIDN:BAA23345.1; PID:g2605632
A:Experimental source: PC-12 cell
A:Accession: PC4417
A:Status: nucleic acid sequence not shown
A:Molecule type: mRNA
A:Residues: 'F', 212-213, 223-860 <H12>
A:CROSS-references: DDBJ:AB001576; NID:g2605478; PIDN:BAA23348.1; PID:g2605479
A:Experimental source: PC-12 cell
C:Comment: This protein is a member of the epidermal growth factor family. It is functioning in the differentiation of MDA-MB-453 cells.
C:Superfamily: human ErbB kinase activator alpha, brain and thymus; EGF homology; immunoglobulin-like
C:Keywords: glycoprotein
F:274-327/Domain: Ig-like #status predicted <IGL>
F:361-397/Domain: EGF homology <EGF>

F;422-444/Domain: hydrophobic #status predicted <HYD>
F;163,294,467/Binding site: carbohydrate (Asn) #status predicted
Query Match 10.3%; Score 157; DB 2; Length 860;
Best Local Similarity 27.7%; Pred. No. 0.00013;
Matches 56; Conservative 24; Mismatches 86; Indels 36; Gaps 8;
QY 66 LGRSVSVFYVYQOTLQGD--FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQNLEE 123
DB 204 LERNQRIIFLEPTEQPLVFKTAPVDPN--GKNI-KKEVGKILCTDCATRPKLKKNKS 260
QY 124 DTVTLVLVAVPSCVPSALSGTVLRCODKEGNPAPEYTFWFGDGRILLENPLRGS 183
DB 261 QTGEV-----GEKQSLKCEAAAGNPPQPSYRWFPGDKGELNR-----S 296
QY 184 QSTNSSYTMNTKTGTLOFTVSKLDTGEYSCAARNVGYRRCCKRMQVDDLNI-----S 238
DB 297 RDIRIKYNGRKNRSLQFNKVKVEDAGEYVCEAENILGKDTVRG-RLHVNVSSTLLSSWS 355
QY 239 GIIAAVVVVALVISVCGLGVCY 260
DB 356 GHARKCNETAKSYCVNG-GVCY 376
RESULT 10
JC5701
Erbb kinase activator alpha1, brain and thymus - rat
C;Species: Rattus norvegicus (Norway rat)
C;Date: 25-Nov-1997 #sequence_revision 25-Nov-1997 #text_change 08-Sep-2002
C;Accession: JC5701; PC4411
R;Higashiyama, S.; Horioka, M.; Yamada, K.; Ichino, N.; Nakano, N.; Miyag
J. Biochem. 122, 675-680, 1997
A;Title: A novel brain-derived member of the epidermal growth factor family that interact
A;Reference number: JC5700; MUID:98006324; PMID:9348101
A;Accession: JC5701
A;Molecule type: mRNA
A;Residues: 1-868 <HIG>
A;Cross-references: DDBU:D89995; NID:g2605629; PIDN:BAA23344.1; PID:g2605630
A;Accession: PC4411
A;Molecule type: protein
A;Residues: 128-162 <H2>
A;Experimental source: PC-12 cell
C;Comment: This protein is a member of the epidermal growth factor family. It is function
ating the differentiation of MDA-MB-453 cells.
C;Superfamily: human Erbb kinase activator alpha, brain and thymus; EGF homology; immun
F;361-397/Domain: EGF homology <EGF>
Query Match 10.3%; Score 157; DB 2; Length 860;
Best Local Similarity 27.7%; Pred. No. 0.00013;
Matches 56; Conservative 24; Mismatches 86; Indels 36; Gaps 8;
QY 66 LGRSVSVFYVYQOTLQGD--FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQNLEE 123
DB 204 LERNQRIIFLEPTEQPLVFKTAPVDPN--GKNI-KKEVGKILCTDCATRPKLKKNKS 260
QY 124 DTVTLVLVAVPSCVPSALSGTVLRCODKEGNPAPEYTFWFGDGRILLENPLRGS 183
DB 261 QTGEV-----GEKQSLKCEAAAGNPPQPSYRWFPGDKGELNR-----S 296
QY 184 QSTNSSYTMNTKTGTLOFTVSKLDTGEYSCAARNVGYRRCCKRMQVDDLNI-----S 238
DB 297 RDIRIKYNGRKNRSLQFNKVKVEDAGEYVCEAENILGKDTVRG-RLHVNVSSTLLSSWS 355
QY 239 GIIAAVVVVALVISVCGLGVCY 260
DB 356 GHARKCNETAKSYCVNG-GVCY 376
RESULT 11
TDHULK
leukocyte antigen-related protein precursor - human
N;Alternate names: leukocyte common antigen homology
N;Contains: protein-tyrosine-phosphatase (BC 3.1.3.48)

C;Species: Homo sapiens (man)
C;Date: 31-Dec-1991 #sequence_revision 31-Dec-1991 #text_change 22-Jun-1999
C;Accession: S03841; JLO051
J;Streuli, M.; Krueger, N.X.; Hall, L.R.; Schlossman, S.F.; Saito, H.
J. Exp. Med. 168, 1523-1530, 1988
A;Title: A new member of the immunoglobulin superfamily that has a cytoplasmic region h
A;Reference number: JLO051; MUID:89035978; PMID:2972792
A;Accession: S03841
A;Status: nucleic acid sequence not shown
A;Molecule type: mRNA
A;Residues: 1-1897 <STR>
A;Cross-references: EMBL:Y00815; NID:g34266; PIDN:CAA68754.1; PID:g34267
C;Genetics:
A;Gene: GDB:PTPRF; LAR
A;Cross-references: GDB:120138; OMIM:179590
A;Map position: lp34-lp34
C;Superfamily: leukocyte antigen-related protein; fibronectin type III repeat homology;
C;Keywords: glycoprotein; phosphoprotein; phosphoric monoester hydrolase; transmembrane
F;1-16/Domain: signal sequence #status predicted <SIG>
F;17-1897/Product: leukocyte antigen-related protein #status predicted <MAT>
F;17-1250/Domain: extracellular #status predicted <EXT>
F;37-99/Domain: immunoglobulin homology <IMM1>
F;139-199/Domain: immunoglobulin homology <IMM2>
F;236-290/Domain: immunoglobulin homology <IMM3>
F;308-390/Domain: fibronectin type III repeat homology <FN3A>
F;403-489/Domain: fibronectin type III repeat homology <FN3B>
F;501-583/Domain: fibronectin type III repeat homology <FN3C>
F;596-685/Domain: fibronectin type III repeat homology <FN3D>
F;698-798/Domain: fibronectin type III repeat homology #status atypical <FN3E>
F;810-893/Domain: fibronectin type III repeat homology <FN3F>
F;905-989/Domain: fibronectin type III repeat homology <FN3G>
F;1001-1078/Domain: fibronectin type III repeat homology <FN3H>
F;1251-1274/Domain: transmembrane #status predicted <TM>
F;1275-1897/Domain: intracellular #status predicted <INT>
F;1285-1897/Domain: leukocyte common antigen cytosolic domain homology <LAC>
F;1365-1586/Domain: protein-tyrosine-phosphatase homology <PTP1>
F;1654-1877/Domain: protein-tyrosine-phosphatase homology <PTP2>
F;44-97,146-197,243-288/Disulfide bonds: #status predicted
F;107,240,285,711,956/Binding site: carbohydrate (Asn) (covalent) #status predicted
F;1538/Active site: Cys (phosphotyrosine intermediate) #status predicted
F;1544/Binding site: substrate phosphate (Arg) #status predicted
F;1829/Active site: Cys (phosphotyrosine intermediate) #status predicted
F;1835/Binding site: substrate phosphate (Arg) #status predicted
Query Match 10.3%; Score 156; DB 1; Length 1897;
Best Local Similarity 25.8%; Pred. No. 0.00039;
Matches 59; Conservative 35; Mismatches 89; Indels 46; Gaps 10;
QY 11 LLLRLVLVALGVHKAYGFSAPKQQVTVAVYQEQAILLACKT---PKTVKSLRWKKLG 67
DB 8 LVMGLVAGAGDSKPVFIKVPEDQ---TGLSGGVASFVCQATGEPK---PRITWMKKG 60
QY 68 RSVSVFYVYQOTLQGD--FKNRAEMIDFN-----IRIKNV-TRSDAGKYRCEVSAPSEQQN 120
DB 61 KKVSV-----SQRFVIEFDGAGSVLRQPLRVQRDEAIYECTATNSLGEINT 108
QY 121 LBEEDTVTLVLVAVPSCV-----VPSSALSGTVLRCODKEGNPAPEYTFWFGDGR 174
DB 109 SAKLSVLEBEQLPPGPPSIDMGFPQLKVKVEKATATML---CA-AGGNPPPEISWFKDFLP 164
QY 175 LLENPLRGSQSTNSSYTMNTKTGTLOFTVSKLDTGEYSCAARNVGYR 223
DB 165 V-----DPATSNGRIRIKQLRSGALQIESSESDDQKYECVATNSAGTR 206
RESULT 12
T23007
hypothetical protein K09C8.5 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 18-Feb-2000
C;Accession: T23007; T23543
R;Kershaw, J.

```
submitted to the EMBL Data Library, November 1995
A:Reference number: Z19651
A:Accession: T23007
A>Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 1-1328 <WIL>
A:Cross-references: EMBL:Z68005; PIDN:CAA91994.1; GSPDB:GN00028; CESP:K09C8.5
A:Experimental source: Clone F59F3
R:Keishaw, J.
submitted to the EMBL Data Library, November 1995
A:Reference number: Z19755
A:Accession: T23543
A>Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 1-1328 <WI2>
A:Cross-references: EMBL:Z68006; PIDN:CAA91999.1; GSPDB:GN00028; CESP:K09C8.5
A:Experimental source: clone K09C8
C:Genetics:
A:Gene: CESP:K09C8.5
A:Map position: X
A:Introns: 34/1; 85/3; 133/3; 182/2; 220/3; 262/2; 390/3; 442/2; 493/3; 563/2; 586/3; 61
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Query Match 10.2%; Score 155.5; DB 2; Length 1328;
Best Local Similarity 27.5%; Pred. No. 0.00028;
Matches 42; Conservative 34; Mismatches 66; Indels 11; Gaps 4;

Qy	69	SVSFVYQQTLQGQFKNAEMIDFNIRIKNTSRDAGKYRCESAPSEQQNLEEDVTVL	128
Dd	382	TITWLFEKQLTESRKHLTKNGSVLKIFPLPNTDIGQECVASNGEKSCHI--FSVSL	439
Qy	129	EVLVAVPVCSEPVSSALSGTVBELRCQDEKNPAPEYTFWKDGIRLENPRLGSO	188
Dd	440	KESQPVIIDAMPDTNATIGQQVTLRCNAK-GFPVDPVMFLFGIRI---PR-----RNT	490
Qy	189	SYTWNTKTGTLQFNVSKLDGTGEYSCEARNSVG	221
Dd	491	RYTISDNNIETIEKVTRHDSGVFTCOAVNSVG	523

RESULT 13
T34416
hypothetical protein Fl2F3.2 - Caenorhabditis elegans
C:Species: Caenorhabditis elegans
C>Date: 29-Oct-1999 #sequence_revision 29-Oct-1999 #text_change 29-Oct-1999
C:Accession: T34416
R:Fulton, B.; Wohldmann, P.
submitted to the EMBL Data Library, July 1998
A>Description: The sequence of C. elegans cosmid Fl2F3.
A:Reference number: Z21521
A:Accession: T34416
A>Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 1-2783 <FUL>
A:Cross-references: EMBL:U80022; PIDN:AAC25886.1; GSPDB:GN00023; CESP:Fl2F3.2
A:Experimental source: strain Bristol N2; clone Fl2F3
C:Genetics:
A:Gene: CESP:Fl2F3.2
A:Map position: 5
A:Introns: 45/3; 90/3; 451/3; 509/1; 2313/3; 2341/3; 2378/3; 2414/2; 2453/3; 2474/2; 252

Query Match 10.2%; Score 155.5; DB 2; Length 2783;
Best Local Similarity 30.4%; Pred. No. 0.00067;
Matches 58; Conservative 15; Mismatches 77; Indels 41; Gaps 6;

Qy	86	RAEMIDFNIRIKNTSRDAGKYRCESAPSEQQNLEEDVTLEVIVAFVPP	137
Dd	2606	RNEGDKFIUKRIANVTADAKGYELTAINPSGOANAELTLTVQSTKGAKPFNESPI	2665
Qy	138	--SCEPVSSALSGTVBELRCQDEKNPAPEYTFWKDGIRL---LENPRLGSO	192
Dd	2666	VQCENKNAELRASFD-----SGTPACRWFNGNELDLGLDGYTTISSDTNSS---	2714
Qy	193	NKTYTGTLQFNVSKLDGTGEYSCEARNVSgyr-----RCPGRKMQVDNLNISGII	242

Search completed: December 9, 2003, 17:13:41
Job time : 17.0557 sec

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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:08:11 ; Search time 9.86411 Seconds
(without alignments)
1420.702 Million cell updates/sec

Title: US-09-852-797-76

Perfect score: 1521

Sequence: 1 MARRSRRLRLRLRLVLA.....SSKATTMSSEDFKTKSFII 298

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 127863 seqs, 47026705 residues

Total number of hits satisfying chosen parameters: 127863

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : SwissProt_41.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1518	99.8	298	1 JAM2 HUMAN	P57087 homo sapien
2	429	28.2	299	1 JAM1 MOUSE	Q9Y624 homo sapien
3	421	27.7	300	1 JAM1 BOVIN	O88792 mus musculus
4	415.5	27.3	298	1 A33 HUMAN	Q9xt56 bos taurus
5	231	15.2	319	1 A33 HUMAN	Q99795 homo sapien
6	195.5	12.9	365	1 FAS2 DROME	P78310 homo sapien
7	166	12.2	873	1 FAS2 DROME	P34082 drosophila
8	180	11.8	365	1 CXAR MOUSE	P97792 mus musculus
9	171	11.2	632	1 UN89 CAEL	O01761 caenorhabdi
10	164	10.8	344	1 CEAG HUMAN	P40199 homo sapien
11	160.5	10.6	1367	1 VGR2 MOUSE	P35136 mus musculus
12	159.5	10.5	837	1 NCW2 MOUSE	O35136 mus musculus
13	157	10.3	868	1 NRG2 RAT	O35569 rattus norv
14	156	10.3	756	1 NRG2 MOUSE	P56974 mus musculus
15	156	10.3	1897	1 PTFP HUMAN	P10586 homo sapien
16	155.5	10.2	837	1 NCW2 HUMAN	O15394 homo sapien
17	155	10.2	850	1 NRG2 HUMAN	O14511 homo sapien
18	153.5	10.1	521	1 CEA1 MOUSE	P31809 mus musculus
19	153.5	10.1	1343	1 VGR2 RAT	O08775 rattus norv
20	151	9.9	1092	1 NCW2 XENLA	P36335 xenopus lae
21	148.5	9.8	519	1 ECTO RAT	P16573 rattus norv
22	148	9.7	1088	1 NCW1 XENLA	P16710 xenopus lae
23	147.5	9.7	1091	1 NCW1 CHICK	P13590 gallus gall
24	147.5	9.7	1912	1 PTFD HUMAN	P23468 homo sapien
25	147	9.7	526	1 NCW2 HUMAN	P13688 homo sapien
26	146.5	9.6	761	1 NCW2 HUMAN	P13592 homo sapien
27	146.5	9.6	848	1 NCW1 HUMAN	P13592 homo sapien
28	146	9.6	1051	1 PTK7 CHICK	Q91048 gallus gall
29	145	9.5	333	1 AMAL DROME	P15364 drosophila
30	145	9.5	764	1 ICCR DROME	Q08180 drosophila
31	145	9.5	1302	1 NRG2 DROME	P20241 drosophila
32	144.5	9.5	349	1 CEAG HUMAN	P31997 homo sapien
33	143	9.4	858	1 NCW1 RAT	P13596 rattus norv

ALIGNMENTS

RESULT 1

ID	JAM2 HUMAN	STANDARD;	PRT;	298 AA.
AC	P57087;			
DT	16-OCT-2001 (Rel. 40, Created)			
DT	16-OCT-2001 (Rel. 40, Last sequence update)			
DT	15-SEP-2003 (Rel. 42, Last annotation update)			
DE	Functional adhesion molecule 2 precursor (Vascular endothelial			
DE	junction-associated molecule) (VE-JAM).			
GN	JAM2 OR VEJAM OR C21ORP43.			
OS	Homo sapiens (Human).			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.			
OX	NCBI_TaxID=9606;			
RN	[1]			
RP	SEQUENCE FROM N.A.			
RC	TISSUE=Vascular endothelial cells;			
RX	MEDLINE=20317114; PubMed=1079521;			
RA	Palmeri D., van Zante A., Huang C.C., Hemmerich S., Rosen S.D.;			
RT	"Vascular endothelial junction-associated molecule, a novel member of			
RT	the immunoglobulin superfamily, is localized to intercellular			
RT	boundaries of endothelial cells.";			
RL	J. Biol. Chem. 275:19139-19145(2000).			
RN	[2]			
RP	SEQUENCE FROM N.A.			
RC	TISSUE=Placenta;			
RX	MEDLINE=20507930; PubMed=10945976;			
RA	Cunningham S.A., Arrate M.P., Rodriguez J.M., Bjerkke R.J.,			
RA	Vanderslice P., Morris A.P., Brock T.A.;			
RT	"A novel protein with homology to the junctional adhesion molecule:			
RT	Characterization of leukocyte interactions.";			
RL	J. Biol. Chem. 275:34750-34756(2000).			
RN	[3]			
RP	SEQUENCE FROM N.A.			
RC	TISSUE=Lung;			
RX	MEDLINE=22388257; PubMed=12477932;			
RA	Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,			
RA	Klauser R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,			
RA	Altshul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,			
RA	Hopkins R.F., Jordan K., Moore I., Max S.I., Wang J., Hsieh F.,			
RA	Diachenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,			
RA	Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,			
RA	Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,			
RA	Raha S.S., Loguercio N.A., Peters G.J., Abramson R.D., Mullahy S.J.,			
RA	Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,			
RA	Richardson S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,			
RA	Villalón D.K., Murny D.M., Sodergren E.J., Lu X., Gibbs R.A.,			
RA	Fahey J., Helton E., Kettman M., Madan A., Rodrigues S., Sanchez A.,			
RA	Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,			
RA	Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,			
RA	Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,			
RA	Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smalilus D.E.,			
RA	Schmerch A., Schein J.E., Jones S.J.M., Marra M.A.;			
RT	"Generation and initial analysis of more than 15,000 full-length			
RT	human and mouse cDNA sequences.";			
RL	Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).			

34	142.5	9.4	265	1	CEA7 HUMAN	Q14002 homo sapien
35	140.5	9.2	344	1	NTR1 RAT	O62718 rattus norv
36	140.5	9.2	847	1	CD22 HUMAN	P20273 homo sapien
37	140	9.2	359	1	LACH DROME	Q24372 drosophila
38	140	9.2	853	1	NCW1 BOVIN	P31836 bos taurus
39	140	9.2	1906	1	KML5 CHICK	P11799 gallus gall
40	140	9.2	4391	1	PGBM HUMAN	P98160 homo sapien
41	139	9.1	725	1	NCA2 MOUSE	P13594 mus musculus
42	139	9.1	1115	1	NCA1 MOUSE	P13595 mus musculus
43	139	9.1	3707	1	PGBM MOUSE	Q05793 mus musculus
44	138.5	9.1	702	1	CEA5 HUMAN	Q06731 homo sapien
45	138.5	9.1	1709	1	SN HUMAN	Q9BZZ2 homo sapien


```
Query Match      27.7%; Score 421; DB 1; Length 300;
Best Local Similarity 34.6%; Pred. No. 2.6e-28;
Matches 104; Conservative 55; Mismatches 130; Indels 12; Gaps 6;

QY 4 RSRHRLLLRLYLVALGYHAYGFSAPKQDQVVVAVXYQEAIALACKTPKTKVXSRLEW 63
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 6 KAGRKLLFLFTSMILGSLVQKGSVYTAQSDVQVPE---NESIKLTCTYSGFSSPRVEM 61

QY 64 KKL-GRSVFVYVYQTLQDGFKNRAEMIDFNIRKNTVTRSDAGKYRCEVSPSQGNLE 122
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 62 KFOGSGTALVCYNSQITAPYADRVTFFSSSGITFSSVTRKDNGBEYTCMVS--EEGQNYG 119

QY 123 EDTVTLVLVAPVPSCEVPSSALSGTVWELRCODKEGNPAPEYTFWFGDGRLLLENPLRG 182
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 120 EVSHLVLVPPSKPTISVSSVTIGNRAVLTCSEHDGSPSESWFKDGISMLTADAKK 179

QY 183 SOS--TNSSYTNTKGTQLQNTVSKLDGTGEYSCARNVSVG--YRCPGKRMQVDDNLISGI 240
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 180 TRAFMNSFTIDPKSGDLIFDPVTAFDGSEYVCAQNGYGTAMRSEAAHMDAVALNVGGI 239

QY 241 IAAVVVVALVSVGLGVCAQRKGYP---SKETSFOKSSNSKATMTSENDFKHTKSYFI 297
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 240 VAAVLVTLILGLIFGVWFAYSRYGTFETTKGTAPGKVIYSPSTRSGEFKQTSFLL 299

QY 298 I 298
   :
Db 300 V 300

RESULT 4
JAMI_BOVIN STANDARD; PRT; 298 AA.
AC Q9XT56;
DT 16-OCT-2001 (Rel. 40, Created)
DT 15-OCT-2001 (Rel. 40, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Junctional adhesion molecule 1 precursor (JAMI).
GN F1LR OR JAMI.
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovidae; Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=99323940; PubMed=10395639;
RA Ozaki H., Ishii K., Horiuchi H., Arai H., Kawamoto T., Okawa K.,
RA Iwamatsu A., Kita T.;
RT of junctional adhesion molecule in human endothelial cells.";
RL J. Immunol. 163:553-557(1999).
CC -!- FUNCTION: Seems to play a role in epithelial tight junction
CC formation. Appears early in primordial forms of cell junctions and
CC recruits PARDS. The association of the PARDS-PARD3 complex may
CC prevent the interaction of PARD3 with JAMI, thereby preventing
CC tight junction assembly (By similarity). Plays a role in
CC regulating monocyte transmigration involved in integrity of
CC epithelial barrier. Involved in platelet activation.
CC -!- SUBUNIT: Interacts with the first PDZ domain of PARD3. The
CC association between PARD3 and PARDS probably disrupts this
CC interaction (By similarity).
CC -!- SUBCELLULAR LOCATION: Type I membrane protein (Potential).
CC -!- TISSUE SPECIFICITY: Localized at tight junctions of both
CC epithelial and endothelial cells.
CC -!- SIMILARITY: BELONGS TO THE IMMUNOGLOBULIN SUPERFAMILY.
CC -!- SIMILARITY: Contains 2 immunoglobulin-like V-type domains.
CC
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CC
CC EMBL; AF111714; AAD42051.1; -.
CC InterPro; IPR007110; Ig-like.
CC InterPro; IPR003598; Ig c2.
CC Pfam; PF00047; Ig; 2.
CC SMART; SM00408; IGC2; 1.
CC PROSITE; PS00835; IG_LIKE; 2.
CC Tight junction; Immunoglobulin domain; Glycoprotein; Transmembrane;
CC Repeat; Signal.
FT SIGNAL 1 24 POTENTIAL.
FT CHAIN 25 298 JUNCTIONAL ADHESION MOLECULE 1.
FT DOMAIN 25 237 EXTRACELLULAR (POTENTIAL).
FT TRANSMEM 238 258 POTENTIAL.
FT DOMAIN 259 298 CYTOPLASMIC (POTENTIAL).
FT DOMAIN 28 124 IG-LIKE V-TYPE 1.
FT DOMAIN 134 227 IG-LIKE V-TYPE 2.
FT DISULFID 49 108 POTENTIAL.
FT DISULFID 152 211 POTENTIAL.
FT CARBOHYD 184 184 N-LINKED (GLCNAC...) (POTENTIAL).
SQ SEQUENCE 298 AA; 32456 MW; 714FE1C1714769A2 CRC64;

Query Match      27.3%; Score 415.5; DB 1; Length 298;
Best Local Similarity 35.1%; Pred. No. 7.4e-28;
Matches 107; Conservative 47; Mismatches 118; Indels 33; Gaps 10;

QY 9 LLL---LLRLYLVALGYHAYGFSAPKQDQVVVAVXYQEAIALAC-----KTPKTKVXSR 60
   ||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 12 LLLFTSMILGSLALGRGAVQTY-----EPVVVPENNPALKSCSYSGFSSP-----R 58

QY 61 LEWK-KLGRSVFVYVYQTLQDGFKNRAEMIDFNIRKNTVTRSDAGKYRCEVSPSQGQ 119
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 59 VENKFTGDIRGLVCYNNKITASYENRVTFSDTGITFHSVTRKDTGMYTCMVS--DEGNG 116

QY 120 NLEEDTVTLVLVAPVPSCEVPSSALSGTVWELRCODKEGNPAPEYTFWFGDGRLLLENP 179
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 117 TYGEVTVQLVLVPPSKPTINVSSTIGTRAVLTCSRDSGSPSEYKWFQDGVEMPLEP 176

QY 180 RLGSQSTNSYNTKGTQLQNTVSKLDGTGEYSCARNVSVGYRRCFGK----RMQVDDL 235
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 177 KSNRAFSNSSYTLNQTGELIFDPVSASDTGDTFCAQN--GY-ASPVKSDTVHMDAVAL 233

QY 236 NISGIIAAVVALVSVGLGVCAQRKGYP---SKETSFOKSSNSKATMTSENDFKHT 293
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 234 NVGGIIVAAVFTVLILGLALIFGIWFAYSRYGTFETTKGTAPGKVIYSPQPNARSDGEFROT 293

QY 294 KSFII 298
   ||| : :
Db 294 SSFLV 298

RESULT 5
A33_HUMAN STANDARD; PRT; 319 AA.
ID A33_HUMAN
AC Q99795;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Cell surface A33 antigen precursor (Glycoprotein A33).
GN GPA33.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A. AND PARTIAL SEQUENCE.
RC TISSUE=Colon carcinoma;
RX MEDLINE=97165045; PubMed=9012807;
RA Heath J.K., White S.J., Johnstone C.N., Catimel B., Simpson R.J.,
RA Moritz R.L., Tu G.-F., Ji H., Whitehead R.H., Groenen L.C.,
RA Scott A.M., Ritter G., Cohen L., Welt S., Old L.J., Nice E.C.,
RA Burgess A.W.;
```

RT "The human A33 antigen is a transmembrane glycoprotein and a novel
 RL member of the immunoglobulin superfamily.";
 RN Proc. Natl. Acad. Sci. U.S.A. 94:469-474(1997).
 RP POST-TRANSLATIONAL MODIFICATIONS.
 RX MEDLINE=97396159; PubMed=9245713;
 RA Ritter G., Cohen L.S., Nice E.C., Catimel B., Burgess A.W.,
 RA Moritz R.L., Ji H., Heath J.K., White S.J., Welt S., Old L.J.,
 RA Simpson R.J.;
 RT "Characterization of posttranslational modifications of human A33
 RT antigen, a novel palmitoylated surface glycoprotein of human
 RT gastrointestinal epithelium.";
 RL Biochem. Biophys. Res. Commun. 236:682-686(1997).
 CC -!- FUNCTION: MAY PLAY A ROLE IN CELL-CELL RECOGNITION AND SIGNALING.
 CC -!- SUBCELLULAR LOCATION: Type I membrane protein.
 CC -!- TISSUE SPECIFICITY: EXPRESSED IN NORMAL GASTROINTESTINAL
 CC EPITHELIUM AND IN 95% OF COLON CANCERS.
 CC -!- PTM: N-GLYCOSYLATED, CONTAINS APPROXIMATELY 8 KDA OF N-LINKED
 CC CARBOHYDRATE.
 CC -!- PTM: PALMITOYLATED.
 CC -!- SIMILARITY: Contains 1 immunoglobulin-like V-type domain.
 CC -!- SIMILARITY: Contains 1 immunoglobulin-like C2-type domain.
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 CC -----
 CC EMBL; U79725; AAC50957.1; -;
 CC Genbank; HGNC:4445; GPA33.
 CC MIM; 602171; -;
 CC DR GO; GO:0005888; C:proteoglycan integral to plasma membrane; TAS.
 CC DR GO; GO:0004872; F:receptor activity; TAS.
 CC DR InterPro; IPR007110; Ig-Like.
 CC DR InterPro; IPR003006; Ig_MHC.
 CC DR Pfam; PF00047; Ig_2.
 CC DR SMART; SM00406; IGV; 1.
 CC DR PROSITE; PS00835; IG_LIKE; 2.
 CC DR Immunoglobulin domain; Lipoprotein; Palmitate; Glycoprotein;
 KW Transmembrane; Signal; Antigen.
 FT SIGNAL 1 21
 FT CHAIN 22 319
 FT DOMAIN 22 235
 FT TRANSF 22 235
 FT TRANSF 236 256
 FT DOMAIN 257 319
 FT DOMAIN 22 134
 FT DOMAIN 140 227
 FT DOMAIN 258 261
 FT DISULFID 43 117
 FT DISULFID 146 222
 FT DISULFID 162 211
 FT CARBOHYD 112 112
 FT CARBOHYD 200 200
 FT CARBOHYD 223 223
 SQ SEQUENCE 319 AA; 35632 MW; 9BFC7AAF45C2408E CRC64;
 Query Match 15.2%; Score 231; DB 1; Length 319;
 Best Local Similarity 28.6%; Pred. No. 2.9e-12;
 Matches 72; Conservative 41; Mismatches 97; Indels 42; Gaps 11;
 QY 30 SAPKDDQVAVXQAEAILACKTPKTVXSR---LEWKKL-----GRSVFVYQQT-LQ 80
 Db 23 SVETPDVLRASQKSVTLPC-TYHTSTSSREGLIQWDLKLLTHTERVVWPFNSKNYIH 81
 QY 81 GD-FKNR-----AEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQNLDEDT---VTLEV 130
 Db 82 GELYKNRVSISNNAEQSDASITIDQLTMADNGTYECSVLSMSD-----LEGNTKSRVLLV 137
 QY 131 LVAPAVPCEVPSSALSGTVVELRCQKNGNPAPEYTFWFKDGIRLLENPRIGSQSTSSSY 190

Db 138 LVPPSKPEGIGETIIGNNIQLTQSKEGSTPQYSWKRYNILNQEQLAQPASQPV 197
 QY 191 TWNTKTTGLQFNVTVKLTGGEYSCEARNISGVRRCP-GKRMQVDDLNIS-----GIIA 242
 Db 198 LKNISTDT-----SGYYICTSSNEEGTQFCNITVAVRSPSNMVALYVGVIAVGVA 247
 QY 243 AVVVVALVISVC 254
 Db 248 ALIIIGIIYYCC 259
 RESULT 6
 CXAR_HUMAN STANDARD; PRT; 365 AA.
 ID P78310; O00694;
 AC 30-MAY-2000 (Rel. 39, Created)
 DT 30-MAY-2000 (Rel. 39, Last sequence update)
 DT 15-SEP-2003 (Rel. 42, Last annotation update)
 DE Coxsackievirus and adenovirus receptor precursor (Coxsackievirus B-
 DE adenovirus receptor) (HCAR) (CVB3 binding protein).
 GN CXADR OR CAR.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=97190109; PubMed=9036860;
 RA Bergelson J.M., Cunningham J.A., Droguett G., Kurt-Jones E.,
 RA Krithivas A., Hong J.S., Horwitz M.S., Crowell R.L., Finberg R.W.;
 RT "Isolation of a common receptor for Coxsackie B viruses and
 RT adenoviruses 2 and 5.";
 RL Science 275:1320-1323(1997).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=97250541; PubMed=9096397;
 RA Tomko R.P., Xu R., Philipson L.;
 RT "HCAR and MCAR: the human and mouse cellular receptors for subgroup C
 RT adenoviruses and group B coxsackieviruses.";
 RL Proc. Natl. Acad. Sci. U.S.A. 94:3352-3356(1997).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=20008750; PubMed=10543405;
 RA Bowles K.R., Gibson J., Wu J., Shaffer L.G., Towbin J.A.,
 RA Bowles N.B.;
 RT "Genomic organization and chromosomal localization of the human
 RT Coxsackievirus B-adenovirus receptor gene.";
 RL Hum. Genet. 105:354-359(1999).
 RN [4]
 RP SEQUENCE FROM N.A.
 RX Anderson C.W., Kieleczawa J., Dunn J.J., Freimuth P.;
 RT "Sequence and expression of CXADR, the human gene for the
 RT coxsackievirus and adenovirus receptor.";
 RL Submitted (OCT-1999) to the EMBL/GenBank/DBJ databases.
 RN [5]
 RP SEQUENCE FROM N.A.
 RX Anderson B., Tomko R., Andersson K., Darban H., Oncu D., Mizra M.,
 RX Sollebrant K., Sonhammer E., Philipson L.;
 RT "Putative regulatory domains in the human and mouse CAR genes.";
 RL Submitted (MAR-2000) to the EMBL/GenBank/DBJ databases.
 RN [6]
 RP SEQUENCE FROM N.A.
 RX TISSUE=Corvix;
 RX MEDLINE=22388257; PubMed=12477932;
 RA Strauberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
 RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
 RA Hopkins R.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
 RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
 RA Brownstein M.J., Udén T.B., Toshiyuki S., Carninci P., Prange C.,
 RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullany S.J.,

RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S.C., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Ketterman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalek U., Smailus D.E.,
RA Scherch A., Schein J.E., Jones S.J.M., Marra M.A.,
RT "Generation and initial analysis of more than 15,000 full-length
human and mouse cDNA sequences";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
CC -!- FUNCTION: SERVES AS A RECEPTOR FOR GROUP B COXSACKIEVIRUSES AND
CC SUBGROUP C OF ADENOVIRUSES (AD2 AND AD5).
CC -!- SUBCELLULAR LOCATION: Type I membrane protein.
CC -!- SIMILARITY: Contains 2 immunoglobulin-like C2-type domains.
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CC EMBL; Y07593; CAA6868.1; -
CC EMBL; U90716; AAC51234.1; -
CC EMBL; AF169366; AAF05908.1; -
CC EMBL; AF169360; AAF05908.1; JOINED.
CC EMBL; AF169361; AAF05908.1; JOINED.
CC EMBL; AF169362; AAF05908.1; JOINED.
CC EMBL; AF169363; AAF05908.1; JOINED.
CC EMBL; AF169364; AAF05908.1; JOINED.
CC EMBL; AF169365; AAF05908.1; JOINED.
CC EMBL; AF200465; AAF24344.1; -
CC EMBL; AF242865; AAG01088.1; -
CC EMBL; AF242862; AAG01088.1; JOINED.
CC EMBL; AF242864; AAG01088.1; JOINED.
CC EMBL; BC003684; AAH03684.1; -
CC EMBL; BC010536; AAH10536.1; -
CC PDB; 1E4J; 13-JUL-01.
CC PDB; 1F5W; 08-NOV-00.
CC PDB; 1KAC; 24-NOV-99.
CC Genew; HGNC:2559; CXADR.
CC MIM; 602621; -
CC GO; GO:0005887; C:integral to plasma membrane; TAS.
CC GO; GO:0004872; F:receptor activity; TAS.
CC InterPro; IPR007110; IG-like.
CC InterPro; IPR003598; IG_C2.
CC InterPro; IPR003006; IG_MHC.
CC Pfam; PF00047; Ig; 2.
CC SMART; SM00408; IGC2; 1.
CC PROSITE; PS00835; IG LIKE; 2.
CC Immunoglobulin domain; Receptor; Transmembrane; Glycoprotein; Signal;
CC Repeat; 3D-structure.
CC SIGNAL 1 19
CC CHAIN 20 365
CC COXSACKIEVIRUS AND ADENOVIRUS RECEPTOR.
CC DOMAIN 20 237
CC EXTRACELLULAR (POTENTIAL).
CC TRANSMEM 238 258
CC DOMAIN 259 365
CC CYTOPLASMIC (POTENTIAL).
CC DOMAIN 20 134
CC IG-LIKE C2-TYPE 1.
CC DOMAIN 141 228
CC IG-LIKE C2-TYPE 2.
CC BY SIMILARITY.
CC DISULFID 41 120
CC DISULFID 162 212
CC FT CARBOHYD 106 106
CC N-LINKED (GLCNAC. .) (POTENTIAL).
CC FT CARBOHYD 201 201
CC N-LINKED (GLCNAC. .) (POTENTIAL).
CC SEQUENCE 365 AA; 40029 MW; AB01C6346CB7FE64 CRC64;
Query Match 12.9%; Score 195.5; DB 1; Length 365;
Best Local Similarity 23.3%; Pred. No. 3.4e-09;
Matches 67; Conservative 57; Mismatches 123; Indels 41; Gaps 9;
QY 10 LLLLLLVVVALGVHKGAFSAPKQDVVAVVQYQAILACK---TPKTKVXSRLEW--- 63

Db 3 LLLCFVLLGVVDPAFSLSLITP--EEMIEKAKGETAYLPCKFTLSPEQGPDLIEWLIS 60
QY 64 -----KKLGRSVSVFYQOITLQDF-----KNRAEMIDFNIRIKNVRTRSDAGKYR 108
Db 61 PADNOKVDQ-VIILYSGDKIYDYYPDLKGRVHFHTSNDLKSGDASINVTNLQLSDITGYQ 119
QY 109 CFSVAPSSEQGNLEEDTTLVLVAPVSPSCVPSSALSGLTVELRCQDKEGNPAPEYTW 168
Db 120 CKV-----KAPGVANKKHLVVRPVGARCYVDGSEIGSFKICEPKEGSLPLQYEW 175
QY 169 FXDGIIRLLENPRLGQSTNSSTYMTKTGTLQNTVSKLDTGEYSCEARNSVGYRRCPGK 228
Db 176 QK-----LSDSQKMPSTWLAEMTSSVISVKNASSEYSCTYCTVNRVVGSDOCLLR 226
QY 229 RMQVDDLNISGLIA-AVVVALVISVGLGVCAQKGYFSKETSFOK 275
Db 227 LNVVPPSKAGLIAGIITGLALALIGLIIFCCRRK---RREKYEK 271
RESULT 7
FAS2 DROME
ID FAS2 DROME STANDARD; PRT; 873 AA.
AC P34082; P34083; Q9W4M6;
DT 01-FEB-1994 (Rel. 28, Created)
DT 01-FEB-1994 (Rel. 28, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Fasciclin II precursor (FAS II).
GN FAS2 OR EG:EG0007.3 OR CG3665.
OS Drosophila melanogaster (Fruit fly).
OC Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
OC Ephydroidea; Drosophilidae; Drosophila.
OX NCBI_TaxID=7227;
RN [1]
RP SEQUENCE FROM N.A. (ISOFORMS 1 AND 2), FUNCTION, SUBCELLULAR LOCATION,
RP AND TISSUE SPECIFICITY.
RC STRAIN=Canton-S;
RX MEDLINE=92005695; PubMed=1913818;
RA Grenningloh G., Rehm E.J., Goodman C.S.;
RT "Genetic analysis of growth cone guidance in Drosophila: fasciclin II
RT functions as a neuronal recognition molecule.";
RL Cell 67:45-57 (1991).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=Berkley;
RX MEDLINE=20196006; PubMed=10731132;
RA Adams M.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D.,
RA Amanatides P.G., Scherer S.E., Li P.W., Hoskins R.A., Galle R.F.,
RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
RA Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
RA Brandon R.C., Rogers Y.-H.C., Blazej R.G., Champagne M., Pfeiffer B.D.,
RA Wan K.H., Doyle C., Baxter E.G., Heit G., Nelson C.R., Miklos G.L.G.,
RA Abril J.F., Agbayani A., An H.-J., Andrews-Pfannkoch C., Baldwin D.,
RA Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
RA Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S.,
RA Borkova D., Botchan M.R., Bouck J., Brokstein P., Brotter P.,
RA Burtis K.C., Busam D.A., Butler H., Cadieu E., Center A., Chandra I.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA de Pablo B., Delcher A., Deng Z., Mays A.D., Dew I., Dietz S.M.,
RA Dodson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
RA Durbin K.J., Evangelista C.C., Ferraz C., Ferreira S., Fleischmann W.,
RA Folsler C., Gabriellian A.E., Garg N.S., Gelbart W.M., Glasser K.,
RA Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,
RA Harris N.L., Harvey D., Heiman T.J., Hernandez J.R., Houck J.,
RA Hostin D., Houston K.A., Howland T.J., Wei M.-H., Ibegwam C.,
RA Jalali M., Kalush F., Karpen G.H., Ke Z., Kennison J.A., Ketchum K.A.,
RA Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,
RA Lasko P., Lei Y., Levitsky A.A., Li J., Li Z., Liang Y., Lin X.,
RA Liu X., Mattei B., McIntosh T.C., McLeod M.P., McPherson D.,
RA Merkulov G., Milshina N.V., Mobarry C., Morris J., Moshrefi A.,
RA Mount S.M., Moy M., Murphy B., Murphy L., Muzny D.M., Nelson D.L.,
RA Nelson D.R., Nelson K.A., Nixon K., Nusskern D.R., Pacleb J.M.,

RA Palazzolo M., Pittman G.S., Pan S., Pollard J., Puri V., Reese M.G.,
RA Reinert K., Remington K., Saunders R.D.C., Scheeler P., Shen H.,
RA Shue B.C., Siden-Kiamos I., Simpson M., Skupski M.P., Smith T.,
RA Spier E., Spradling A.C., Stapleton M., Strong R., Sun E.,
RA Svirkas R., Tector C., Turner R., Venter E., Wang A.H., Wang X.,
RA Wang Z.-Y., Wasserman D.A., Weinstein G.M., Weissenbach J.,
RA Williams S.M., Woodage T., Worley K.C., Wu D., Yang S., Yao Q.A.,
RA Ye J., Yeh R.-F., Zaveri J.S., Zhan M., Zhang G., Zhao Q., Zheng L.O.,
RA Zheng X.H., Zhong F.N., Zhong W., Zhou X., Zhu S., Smith H.O.,
RA Gibbs R.A., Myers E.W., Rubin G.M., Venter J.C.,
RT "The genome sequence of *Drosophila melanogaster*."
RL Science 287:2185-2195 (2000).
RN [3]
RP REVISIONS, AND ALTERNATIVE SPLICING.
RX STRAIN=Berkely;
RC MEDLINE=22426069; PubMed=12537572;
RA Misra S., Crosby M.A., Mungall C.J., Matthews B.B., Campbell K.S.,
RA Hradecky P., Huang Y., Kaminker J.S., Millburn G.H., Prochuk S.E.,
RA Smith C.D., Tupy J.L., Whitfield E.J., Bayraktaroglu L., Berman B.P.,
RA Bettencourt B.R., Celisner S.E., de Grey A.D.N.J., Drysdale R.A.,
RA Harris N.L., Richter J., Russo S., Schroeder A.J., Shu S.Q.,
RA Stapleton M., Yamada C., Ashburner M., Gelbart W.M., Rubin G.M.,
RA Lewis S.E.;
RT "Annotation of the *Drosophila melanogaster* euchromatic genome: a
RT systematic review."
RL Genome Biol. 3:RESEARCH0083.1-RESEARCH0083.22 (2002).
RN [4]
RP SEQUENCE OF 22-873 FROM N.A.
RX STRAIN=Oregon-R;
RC MEDLINE=20196011; PubMed=10731137;
RA Benos P.V., Gatt M.K., Ashburner M., Murphy L., Harris D.,
RA Barrall B.G., Ferraz C., Vidal S., Brun C., Demallies J., Cadieu E.,
RA Dreano S., Gloux S., Lelaure V., Mottier S., Galibert F., Borkova D.,
RA Minana B., Kafatos F.C., Louis C., Siden-Kiamos I., Bolshakov S.,
RA Papagiannakis G., Spanos L., Cox S., Madieno E., de Pablo S.,
RA Modolell J., Peter A., Schoettler P., Werner M., Mourikoti F.,
RA Beirnt N., Dowe G., Schaefer U., Jaecle H., Bucheton A.,
RA Callister D.M., Campbell L.A., Darlamitsou A., Henderson N.S.,
RA McMillan P.J., Salles C., Tait E.A., Valenti P., Saunders R.D.C.,
RA Glover D.M.;
RT "From sequence to chromosome: the tip of the X chromosome of *D.*
RT *melanogaster*."
RL Science 287:2220-2222 (2000).
CC -!- FUNCTION: Neuronal recognition molecule for the MPI axon pathway,
CC pathway recognition for axons during the development of nerve
CC fascicles.
CC -!- SUBCELLULAR LOCATION: Type I membrane protein (isoform 1);
CC attached to the membrane by a GPI-anchor (isoform 2).
CC -!- ALTERNATIVE PRODUCTS:
CC Event=Alternative splicing; Named isoforms=3;
CC Comment=Experimental confirmation may be lacking for some
CC isoforms;
CC Name=1; Synonyms=A, Membrane-linked;
CC IsoId=P34082-1; Sequence=Displayed;
CC Name=2; Synonyms=C, Phosphatidylinositol-linked;
CC IsoId=P34082-2; Sequence=VSP_002508, VSP_002509;
CC Name=3; Synonyms=B;
CC IsoId=P34082-3; Sequence=VSP_002506, VSP_002507;
CC -!- TISSUE SPECIFICITY: In embryos, both isoforms are initially
CC expressed on the surface of the axons in the MPI pathway and later
CC on several other longitudinal axon fascicles.
CC -!- SIMILARITY: Contains 5 immunoglobulin-like C2-type domains.
CC -!- SIMILARITY: Contains 2 fibronectin type III domains.
CC -----
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CC -----
EMBL; M77165; AAA28527.1; -.

DR EMBL; M77166; AAA28528.1; -.
DR EMBL; AL033125; CAA21825.1; -.
DR EMBL; AE003430; AAP45925.2; -.
DR EMBL; AE003430; AAN09119.1; -.
DR EMBL; AL033125; CAA21826.1; -.
DR PIR; A41054; A41054.
DR FlyBase; FBgn000635; Fae2.
DR GO; GO:0005886; C:plasma membrane; IDA.
DR GO; GO:0007156; P:homophilic cell adhesion; IDA.
DR GO; GO:0007611; P:learning and/or memory; IMP.
DR GO; GO:0016319; P:mushroom body development; IMP.
DR GO; GO:0008038; P:neuronal cell recognition; IDA.
DR GO; GO:0045473; P:response to ethanol (sensu Insecta); NAS.
DR InterPro; IPR003961; FN III.
DR InterPro; IPR007110; IG-like.
DR InterPro; IPR003598; IG_C2.
DR InterPro; IPR003006; IG_MHC.
DR Pfam; PF00041; fn3; 2.
DR Pfam; PF00047; ig; 5.
DR SMART; SM00408; FN3; 2.
DR SMART; SM00408; IGC2; 3.
DR PROSITE; PS50835; IG-LIKE; 5.
KW Cell adhesion; Glycoprotein; Repeat; Alternative splicing;
KW Immunoglobulin domain; Transmembrane; GPI-anchor; Signal;
KW Neurogenesis.
FT SIGNAL 1 28 POTENTIAL
FT CHAIN 29 873 FASCICLIN II.
FT DOMAIN 29 751 EXTRACELLULAR (POTENTIAL).
FT TRANSMEM 752 769 POTENTIAL.
FT DOMAIN 770 873 CYTOPLASMIC (POTENTIAL).
FT DOMAIN 31 131 IG-LIKE C2-TYPE 1.
FT DOMAIN 138 223 IG-LIKE C2-TYPE 2.
FT DOMAIN 230 318 IG-LIKE C2-TYPE 3.
FT DOMAIN 323 423 IG-LIKE C2-TYPE 4.
FT DOMAIN 428 520 IG-LIKE C2-TYPE 5.
FT DOMAIN 544 619 FIBRONECTIN TYPE-III 1.
FT DOMAIN 648 705 FIBRONECTIN TYPE-III 2.
FT DISULFID 54 116 POTENTIAL.
FT DISULFID 159 207 POTENTIAL.
FT DISULFID 251 302 POTENTIAL.
FT DISULFID 343 407 POTENTIAL.
FT DISULFID 451 504 POTENTIAL.
FT CARBOHYD 74 74 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 250 250 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 330 330 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 448 448 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 458 458 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 576 576 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT VARSPLIC 737 773 GIDVQVABRQVSSAAIVGIAIGVLLLVVDLLC ->
FT DNPSTSGAAPLAQLLVITALTPTMLLIPPTHTA (in
FT isoform 3).
FT FTIG=VSP_002506.
FT Missing (in isoform 3).
FT FTIG=VSP_002507.
FT IDVQVABRQVSSAAIVGIAIGVLLLVVDLLCITVH
FT MGWATMCKAKRSEIDDEKLGSGQLKEP -> ESDS
FT ANNGLTLLYAGFNSGVGLKRLFTTTTITATTTIT
FT SITATTITITATISITLLSVLSMLA (in isoform
FT 2).
FT FTIG=VSP_002508.
FT Missing (in isoform 2).
FT FTIG=VSP_002509.
FT S -> R (IN REF. 4; CAA21826).
FT CONFLICT 804 804
FT SEQUENCE 873 AA; 96926 MW; E48F0484CCE62AC9 CRC64;
SQ
Query Match 12.2%; Score 186; DB 1; Length 873;
Best Local Similarity 24.6%; Pred. No. 6.1e-08;
Matches 67; Conservative 50; Mismatches 101; Indels 54; Gaps 13;
QY 30 SAPKDDQVVTVXVQEAILACKT---PKTKVSRLEWKLG---RSVSFVYVQOTLQGD 83
DB 142 NAPENQYTLG---QDYVMCEVKADPNPTI----DMLRNGDPITRTNDKYVVQT----- 189

DR	SMART; SM00408; IGC2; 1.
DR	PROSITE; PS50835; IG LIKE; 2.
KW	Immunoglobulin domain; Receptor; Transmembrane; Glycoprotein; Signal;
KW	Repeat.
FT	SIGNAL
FT	CHAIN
FT	POTENTIAL.
FT	CXSACKIEVIRUS AND ADENOVIRUS RECEPTOR
FT	HOMOLOG.
FT	EXTRACELLULAR (POTENTIAL).
FT	POTENTIAL.
FT	CYTOPLASMIC (POTENTIAL).
FT	IG-LIKE C2-TYPE 1.
FT	IG-LIKE C2-TYPE 2.
FT	BY SIMILARITY.
FT	N-LINKED (GLCNAC. .) (POTENTIAL).
FT	DISULFID 162 212
FT	DISULFID 106 106
FT	CARBOHYD 201 201
FT	CARBOHYD 201 201
FT	CONFLICT 340 365
FT	VAAALSRMGAVPMIPQAQSGSIV -> FKYAVKTDGIT
FT	VV (IN REF. 2 AND 3)
FT	SEQUENCE 365 AA; 39947 MW; 5445B4B52A34B2A2 CRC64;
FT	Query Match 11.8%; Score 180; DB 1; Length 365;
FT	Best Local Similarity 23.7%; Pred.No. 6.8e-08;
FT	Matches 75; Conservative 44; Mismatches 130; Indels 68; Gaps 9;
Qy	28 GFSAPOQQVVTAVYQEAILACK---TPKKTVXSRLEW-----KKLGRSVSFVY---- 74
Db	19 GLSTTPEQRIEKAKGETAYLPCKFTLSPPDGQDLIEWLISPDSNQIIVDPQVILIYS GDK 78
Qy	75 ----YQOTLGQDF---KNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEQONLEEDTVT 127
Db	79 IYDNYYPDLAGRHHFTSNVYKSGDASINVTNQLSDIGTYQCKV-----KKAPGVANKKFL 134
Qy	128 LEVLVPAVPSCVEPSSALSGTVVELRCODEKGNPAPEYTFWKDIGRIILENPRLGOSTN 187
Db	135 LTVLVPSGTRCFVDGSEBIGDNFKLCKEKGSLPLQFEW-----QKLS 179
Qy	188 SSTVMNT-----KTGTQLQNTVSKLDTGYSCEARNSSVCYRRCPKRMQVDDLNI SGI L 241
Db	180 DSQTPTPWLAEMTSPVISVNASSYSGYTCTVQNVRSGDQCMLRLDVVPPSNRAGTI 239
Qy	242 AAVVV---VALVSVCGGLGVCYAQ R-----KGYSKETSFQKSNS 278
Db	240 AGAVIGITLLALVLIGAILFCCHKRKREEKYEVHHDIREDDVPKRSRTSTARSYGNSH 299
Qy	279 SSKAATWSNDPFKH TKS 295
Db	300 SSLGSWSPSNMEGYSKT 316
RESULT 9	
ID	UN89 CAEEEL
ID	UN89 CASEL STANDARD; PRT; 6632 AA.
AC	OU1761; Q17362;
DT	15-SEP-2003 (Rel. 42, Created)
DT	15-SEP-2003 (Rel. 42, Last sequence update)
DE	15-SEP-2003 (Rel. 42, Last annotation update)
DE	Muscle M-line assembly protein unc-89 (Uncoordinated protein 89).
GN	UNC-89 OR CO9DI.1.
OS	Caenorhabditis elegans.
OC	Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida; Rhabditoidea;
OC	Rhabditidae; Pelodierinae; Caenorhabditis.
NCBI_TaxID=6239;	
[1]	SEQUENCE FROM N.A., FUNCTION, AND TISSUE SPECIFICITY.
RP	STRAIN=Bristol N2;
RC	MEDLINE=96180278; PubMed=8603916;
RX	Benjan G.M.; Tinley T.L.; Tang X.; Borodovsky M.;
RA	"The Caenorhabditis elegans gene unc-89, required for muscle M-line
RT	assembly, encodes a giant modular protein composed of Ig and signal
RT	transduction domains";
RL	J. Cell Biol. 132:835-848(1996).
RN	[2]

RC STRAIN=Bristol N2;
RA Du Z., Le T.T., Wilson R.;
RL Submitted (MAY-1997) to the EMBL/GenBank/DBJ databases.
RN [3]
RP REVISIONS.
RA Waterston R.;
RL Submitted (APR-2002) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: Structural component of the muscle M-line. Myofibrillar
CC lattice assembly begins with positional cues laid down in the
CC basement membrane and muscle cell membrane. UNC-89 responds to
CC these signals, localizes, and then participates in assembling an
CC M-line.
CC
CC -1- TISSUE SPECIFICITY: Localizes to the middle of A-bands.
CC
CC -1- SIMILARITY: Contains 1 DBL-homology (DH) domain.
CC
CC -1- SIMILARITY: Contains 1 fibronectin type III domain.
CC
CC -1- SIMILARITY: Contains 49 immunoglobulin-like C2-type domains.
CC
CC -1- SIMILARITY: Contains 1 PH domain.
CC
CC -1- SIMILARITY: Contains 5 RCSD domains.
CC
CC -1- SIMILARITY: Contains 1 SH3 domain.
CC
CC -----
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CC -----
CC EMBL; U33058; AAB00542.1; --
CC EMBL; AF003131; AAB54132.2; --
CC PDB; 1FHO; 20-DEC-00.
CC WormPep; C09D1.1; CE30426.
CC InterPro; IPR003961; FN III.
CC InterPro; IPR007110; Ig-like.
CC InterPro; IPR003598; Ig_c2.
CC InterPro; IPR003006; Ig_MHC.
CC InterPro; IPR001849; PH.
CC InterPro; IPR007850; RCSD.
CC InterPro; IPR000219; RhoGEF.
CC InterPro; IPR001452; SH3.
CC Pfam; PF00041; fn3; 1.
CC Pfam; PF00047; ig; 47.
CC Pfam; PF00169; PH; 1.
CC Pfam; PF05177; RCSD; 5.
CC Pfam; PF06621; RhoGEF; 1.
CC Pfam; PF00018; SH3; 1.
CC SMART; SM00408; IGC2; 23.
CC SMART; SM00325; RhoGEF; 1.
CC SMART; SM00326; SH3; 1.
CC PROSITE; PS50010; DH_2; 1.
CC PROSITE; PS50835; IG-LIKE; 49.
CC PROSITE; PS50003; PH_DOMAIN; 1.
CC PROSITE; PS50002; SH3; 1.
CC Muscle protein; immunoglobulin domain; Repeat; SH3 domain;
KW 3D-structure.
FT DOMA_N 63 127 SH3.
FT DOMA_N 152 330 DH.
FT DOMA_N 342 498 PH.
FT DOMA_N 547 633 IG-LIKE C2-TYPE 1.
FT DOMA_N 648 736 IG-LIKE C2-TYPE 2.
FT DOMA_N 748 838 IG-LIKE C2-TYPE 3.
FT DOMA_N 946 1033 IG-LIKE C2-TYPE 4.
FT DOMA_N 1044 1132 IG-LIKE C2-TYPE 5.
FT DOMA_N 1140 1227 IG-LIKE C2-TYPE 6.
FT DOMA_N 1272 1315 THR-RICH.
FT DOMA_N 1375 1475 RCSD 1.
FT DOMA_N 1479 1585 RCSD 2.
FT DOMA_N 1597 1695 RCSD 3.
FT DOMA_N 1700 1799 RCSD 4.
FT DOMA_N 1800 1860 RCSD 5.
FT DOMA_N 1982 2067 IG-LIKE C2-TYPE 7.
FT DOMA_N 2071 2163 IG-LIKE C2-TYPE 8.
FT DOMA_N 2171 2261 IG-LIKE C2-TYPE 9.

FT DOMAIN 2269 2359 IG-LIKE C2-TYPE 10.
FT DOMAIN 2367 2455 IG-LIKE C2-TYPE 11.
FT DOMAIN 2463 2564 IG-LIKE C2-TYPE 12.
FT DOMAIN 2563 2651 IG-LIKE C2-TYPE 13.
FT DOMAIN 2657 2746 IG-LIKE C2-TYPE 14.
FT DOMAIN 2754 2858 IG-LIKE C2-TYPE 15.
FT DOMAIN 2887 2980 IG-LIKE C2-TYPE 16.
FT DOMAIN 2994 3081 IG-LIKE C2-TYPE 17.
FT DOMAIN 3087 3183 IG-LIKE C2-TYPE 18.
FT DOMAIN 3189 3280 IG-LIKE C2-TYPE 19.
FT DOMAIN 3286 3376 IG-LIKE C2-TYPE 20.
FT DOMAIN 3384 3469 IG-LIKE C2-TYPE 21.
FT DOMAIN 3482 3572 IG-LIKE C2-TYPE 22.
FT DOMAIN 3580 3667 IG-LIKE C2-TYPE 23.
FT DOMAIN 3686 3777 IG-LIKE C2-TYPE 24.
FT DOMAIN 3817 3908 IG-LIKE C2-TYPE 25.
FT DOMAIN 3920 4009 IG-LIKE C2-TYPE 26.
FT DOMAIN 4018 4106 IG-LIKE C2-TYPE 27.
FT DOMAIN 4109 4201 IG-LIKE C2-TYPE 28.
FT DOMAIN 4212 4297 IG-LIKE C2-TYPE 29.
FT DOMAIN 4302 4387 IG-LIKE C2-TYPE 30.
FT DOMAIN 4400 4485 IG-LIKE C2-TYPE 31.
FT DOMAIN 4489 4580 IG-LIKE C2-TYPE 32.
FT DOMAIN 4588 4678 IG-LIKE C2-TYPE 33.
FT DOMAIN 4681 4771 IG-LIKE C2-TYPE 34.
FT DOMAIN 4873 4961 IG-LIKE C2-TYPE 35.
FT DOMAIN 4965 5057 IG-LIKE C2-TYPE 36.
FT DOMAIN 5067 5160 IG-LIKE C2-TYPE 37.
FT DOMAIN 5171 5260 IG-LIKE C2-TYPE 38.
FT DOMAIN 5277 5366 IG-LIKE C2-TYPE 39.
FT DOMAIN 5383 5472 IG-LIKE C2-TYPE 40.
FT DOMAIN 5487 5578 IG-LIKE C2-TYPE 41.
FT DOMAIN 5595 5685 IG-LIKE C2-TYPE 42.
FT DOMAIN 5701 5790 IG-LIKE C2-TYPE 43.
FT DOMAIN 5815 5904 IG-LIKE C2-TYPE 44.
FT DOMAIN 5925 6014 IG-LIKE C2-TYPE 45.
FT DOMAIN 6038 6130 IG-LIKE C2-TYPE 46.
FT DOMAIN 6150 6239 IG-LIKE C2-TYPE 47.
FT DOMAIN 6275 6368 FIBRONECTIN TYPE-III.
FT DOMAIN 6413 6502 IG-LIKE C2-TYPE 48.
FT DOMAIN 6507 6596 IG-LIKE C2-TYPE 49.
FT DISULFID 568 621 POTENTIAL.
FT DISULFID 2908 2975 POTENTIAL.
FT DISULFID 3015 3065 POTENTIAL.
FT DISULFID 3707 3759 POTENTIAL.
FT DISULFID 3826 3890 POTENTIAL.
FT DISULFID 5092 5157 POTENTIAL.
FT DISULFID 5298 5350 POTENTIAL.
FT DISULFID 5508 5560 POTENTIAL.
FT DISULFID 5616 5669 POTENTIAL.
FT DISULFID 5722 5764 POTENTIAL.
FT DISULFID 5836 5901 POTENTIAL.
FT DISULFID 5946 5998 POTENTIAL.
FT DISULFID 6036 6171 POTENTIAL.
FT DISULFID 6421 6486 POTENTIAL.
FT CONFLICT 2137 2137 A -> P (IN REF. 1).
FT CONFLICT 2245 2247 AXA -> PKP (IN REF. 1).
FT CONFLICT 2258 2258 A -> P (IN REF. 1).
FT CONFLICT 2284 2284 E -> G (IN REF. 1).
FT CONFLICT 2297 2297 M -> I (IN REF. 1).
FT CONFLICT 3531 3531 A -> G (IN REF. 1).
FT CONFLICT 3884 3888 DAGEY -> RRRRI (IN REF. 1).
FT CONFLICT 3929 3929 A -> V (IN REF. 1).
FT CONFLICT 5134 5134 A -> P (IN REF. 1).
FT CONFLICT 5145 5145 T -> S (IN REF. 1).
FT CONFLICT 5185 5185 G -> A (IN REF. 1).
FT CONFLICT 5199 5199 K -> N (IN REF. 1).
FT CONFLICT 5202 5202 L -> F (IN REF. 1).
FT CONFLICT 5213 5213 F -> L (IN REF. 1).
FT CONFLICT 6178 6178 A -> G (IN REF. 1).
FT CONFLICT 6268 6268 K -> E (IN REF. 1).
SQ SEQUENCE 6632 AA; 731665 MW; 262D3EDD62960E89 CRC64;

QY 209 TGEYSCEARNVGVRRCPG-KRMOVDLNIISG-----IIAAVVVVVALVISV 253
 ID VGR2_MOUSE STANDARD; PRT; 1367 AA.
 DB 294 SGSMYCAHNS-----ATGLNRTVTMTVSGSAPVLSAVATVGTIGV 337

RESULT 11
 VGR2_MOUSE
 AC P35918;
 DT 01-JUN-1994 (Rel. 29, Created)
 DT 01-JUN-1994 (Rel. 29, Last sequence update)
 DT 15-SEP-2003 (Rel. 42, last annotation update)
 DE Vascular endothelial growth factor receptor 2 precursor (EC 2.7.1.112)
 DE (VEGFR-2) (Protein-tyrosine kinase receptor flk-1) (Fetal liver kinase
 DE 1) (Kinase NVK)
 GN KDR OR FLK1 OR FLK-1.
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 OX NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=BALB/c; TISSUE=Embryo;
 RX MEDLINE=93208880; PubMed=7681362;
 RA Millauer B., Witzmann-Voos S., Schnurch H., Martinez R.,
 RA Mueller N.P.H., Risau W., Ullrich A.;
 RT "High affinity VEGF binding and developmental expression suggest
 RT Flk-1 as a major regulator of vasculogenesis and angiogenesis.";
 RL Cell 72:835-846(1993).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC STRAIN=C3H/He; TISSUE=Fetal liver;
 RX MEDLINE=92020984; PubMed=1717995;
 RA Mathews W., Jordan C.T., Gavin M., Jenkins N.A., Copeland N.G.,
 RA Lemischka I.R.;
 RT "A receptor tyrosine kinase cDNA isolated from a population of
 RT enriched primitive hematopoietic cells and exhibiting close genetic
 RT linkage to c-kit.";
 RL Proc. Natl. Acad. Sci. U.S.A. 88:9026-9030(1991).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=93141255; PubMed=8423988;
 RA Celrich R.B., Reid H.H., Bernard O., Ziemleki A., Wilks A.F.;
 RT "NYK/FLK-1: a putative receptor protein tyrosine kinase isolated from
 RT E10 embryonic neuroepithelium is expressed in endothelial cells of
 RT the developing embryo.";
 RL Oncogene 8:11-18(1993).
 RN [4]
 RP SEQUENCE OF 1-15 FROM N.A.
 RX MEDLINE=96032749; PubMed=7559454;
 RA Patterson C., Perrella M.A., Hsieh C.-M., Yoshizumi M., Lee M.-E.,
 RA Harber E.;
 RT "Cloning and functional analysis of the promoter for KDR/flk-1, a
 RT receptor for vascular endothelial growth factor.";
 RL J. Biol. Chem. 270:23111-23118(1995).
 RN [5]
 RP FUNCTION.
 RX MEDLINE=93361481; PubMed=8356051;
 RA Quinn T.P., Peters K.G., de Vries C., Ferrara N., Williams L.T.;
 RT "Fetal liver kinase 1 is a receptor for vascular endothelial growth
 RT factor and is selectively expressed in vascular endothelium.";
 RL Proc. Natl. Acad. Sci. U.S.A. 90:7533-7537(1993).
 CC -!- FUNCTION: RECEPTOR FOR VEGF OR VEGF-C. HAS A TYROSINE-PROTEIN
 CC KINASE ACTIVITY. THE VEGF-KINASE LIGAND/RECEPTOR SIGNALING SYSTEM
 CC PLAYS A KEY ROLE IN VASCULAR DEVELOPMENT AND REGULATION OF
 CC VASCULAR PERMEABILITY.
 CC -!- CATALYTIC ACTIVITY: ATP + a protein tyrosine = ADP + protein
 CC tyrosine phosphate.
 CC -!- SUBCELLULAR LOCATION: Type I membrane protein.
 CC -!- TISSUE SPECIFICITY: EXPRESSED AT HIGH LEVELS IN ADULT HEART, LUNG,
 CC KIDNEY, BRAIN AND SKELETAL MUSCLE, BUT IS ALSO EXPRESSED AT LOWER
 CC LEVELS IN MOST OTHER ADULT TISSUES.

CC -!- SIMILARITY: BELONGS TO THE CSF-1/PDGF RECEPTOR FAMILY OF TYROSINE-
 CC PROTEIN KINASES.
 CC -!- SIMILARITY: Contains 7 immunoglobulin-like C2-type domains.
 CC -----
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 CC or send an email to license@isb-sib.ch).
 CC -----
 CC EMBL; X70842; CAA50192.1; -;
 CC EMBL; X59397; CAA42040.1; -;
 CC EMBL; S53103; BAB25043.1; -;
 CC EMBL; X89777; CAA61917.1; -;
 CC PIR; A41228; A41228.
 CC HSP; P11362; IFGK.
 CC MGD; MGI:96683; Kdr.
 CC InterPro; IPR007110; Ig-like.
 CC InterPro; IPR003598; Ig_c2.
 CC InterPro; IPR003006; Ig_MHC.
 CC InterPro; IPR000719; Prot_kinase.
 CC InterPro; IPR001824; RTKinaseIII.
 CC InterPro; IPR001245; Tyr_kinase.
 CC Pfam; PF00047; ig; 6.
 CC Pfam; PF00069; pkinase; 1.
 CC ProDom; PD000001; Prot_kinase; 2.
 CC SMART; SM00408; IGC2; 1.
 CC SMART; SM00219; TyrKc; 1.
 CC PROSITE; PS50835; IG LIKE; 5.
 CC PROSITE; PS00107; PROTEIN KINASE ATP; 1.
 CC PROSITE; PS50011; PROTEIN KINASE DOM; 1.
 CC PROSITE; PS00109; PROTEIN KINASE TYR; 1.
 CC PROSITE; PS00240; RECEPTOR TYR KIN III; 1.
 CC Angiogenesis; Signal; Transferrase; Tyrosine-protein kinase; Receptor;
 CC Transmembrane; Glycoprotein; Phosphorylation; ATP-binding;
 CC Immunoglobulin domain; Repeat.
 FT SIGNAL 1 19 POTENTIAL.
 FT CHAIN 20 1367 VASCULAR ENDOTHELIAL GROWTH FACTOR
 FT RECEPTOR 2.
 FT EXTRACELLULAR (POTENTIAL).
 FT POTENTIAL.
 FT CYTOPLASMIC (POTENTIAL).
 FT IG-LIKE C2-TYPE 1.
 FT IG-LIKE C2-TYPE 2.
 FT IG-LIKE C2-TYPE 3.
 FT IG-LIKE C2-TYPE 4.
 FT IG-LIKE C2-TYPE 5.
 FT IG-LIKE C2-TYPE 6.
 FT IG-LIKE C2-TYPE 7.
 FT PROTEIN KINASE.
 FT NP_BIND 832 1160 ATP (BY SIMILARITY).
 FT BINDING 866 866 ATP (BY SIMILARITY).
 FT ACT_SITE 1026 1026 BY SIMILARITY.
 FT CARBOHYD 46 46 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 98 98 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 145 145 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 160 160 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 247 247 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 320 320 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 376 376 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 397 397 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 509 509 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 521 521 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 578 578 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 611 611 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 617 617 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 629 629 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 673 673 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 702 702 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 719 719 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT MOD_RES 1057 1057 PHOSPHORYLATION (AUTO-) (BY SIMILARITY).

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FT CONFLICT 25 25 P -> T (IN REF. 1).
FT CONFLICT 679 779 G -> D (IN REF. 3).
FT CONFLICT 783 784 LV -> VL (IN REF. 1).
FT CONFLICT 917 917 S -> C (IN REF. 1).
FT CONFLICT 1341 1367 QUTSLNGSGVPAPPPPPGHERGAA -> RSPPV
SQ SEQUENCE 1367 AA; 152516 MW; EFC99704FIDCA266 CRC64;

Query Match 10.6%; Score 160.5; DB 1; Length 1367;
Best Local Similarity 24.8%; Pred. No. 1.5e-05;
Matches 53; Conservative 23; Mismatches 75; Indels 63; Gaps 6;

Qy 44 QEAILACKTPKTYKSRLEWKLGRSFFVYQQTLOGDFKRAEMIDFN----- 93
Db 562 QESVSLCTADRTNFNLTWYKLGSAQTSVHMGESLTPVCKNLDAWLKNGTMSNSTND 621
Qy 94 ---TRIKNVTRSDAGKYRC-----EVSAREQQONLEEDTVILEV 130
Db 622 ILIVAFQNSLQDQDYVCSAQDKTKRKLCHLVQLIILERMAMITG-NLENTQTTI-- 678
Qy 131 LVAPAVPSCVPSSALSGTVVELRQDKGEGNPAPEYTFWKDGIRLLENPRIGSQSTNSY 190
Db 679 -----GETIEVTC-PASGNPTPHITWFKNETLIVDSGIVLRDGRNL 720
Qy 191 TMTNKTGTLOPNTVSKLDTGBYSCEARNSVGRR 224
Db 721 TI-----RRVRKEDGGLYTCQACNLGCR 745

RESULT 12
NCM2 MOUSE
ID NCM2_MOUSE STANDARD; PRT; 837 AA.
AC O35136; O35962;
DT 15-JUL-1998 (Rel. 36, Created)
DT 15-JUL-1998 (Rel. 36, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Neural cell adhesion molecule 2 precursor (N-CAM 2) (RB-8 neural cell
DE adhesion molecule) (R4B12).
OS NCAM2 OR OCAM OR RNCAM.
GN Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
[1]
SEQUENCE FROM N.A. (ISOFORMS LONG AND SHORT).
RC STRAIN=BALB/c; TISSUE=Olfactory neuroepithelium;
RX MEDLINE=97368238; PubMed=9221781;
RA Yoshihara Y., Kawasaki M., Tamada A., Fujita H., Hayashi H.,
RA Kagamiyama H., Mori K.;
RT "OCAM: A new member of the neural cell adhesion molecule family
RT related to zone-to-zone projection of olfactory and vomeronasal
RT axons.";
RL J. Neurosci. 17:5830-5842(1997).
[2]
SEQUENCE FROM N.A. (ISOFORM SHORT).
RC STRAIN=C57BL/6J; TISSUE=Olfactory epithelium;
RX MEDLINE=97476194; PubMed=9334170;
RA Alenius M., Bohm S.;
RT "Identification of a novel neural cell adhesion molecule-related gene
RT with a potential role in selective axonal projection.";
RL J. Biol. Chem. 272:26083-26086(1997).
CC -I- FUNCTION: May play important roles in selective fasciculation and
CC zone-to-zone projection of the primary olfactory axons.
CC -I- SUBCELLULAR LOCATION: Type I membrane protein (long isoform) and
CC attached to the membrane by a GPI-anchor (short isoform).
CC -I- ALTERNATIVE PRODUCTS:
CC Event=Alternative splicing; Named isoforms=2;
CC Name=Long;
CC IsoId=O35136-1; Sequence=Displayed;
CC Name=Short;
CC IsoId=O35136-2; Sequence=VSP_002590;
CC -I- TISSUE SPECIFICITY: EXPRESSED IN SUBSETS OF BOTH OLFACTORY AND
CC VOMERONASAL NEURONS IN A ZONE-SPECIFIC MANNER.

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CC -I- SIMILARITY: BELONGS TO THE IMMUNOGLOBULIN SUPERFAMILY.
CC -I- SIMILARITY: Contains 5 immunoglobulin-like C2-type domains.
CC -I- SIMILARITY: Contains 2 fibronectin type III domains.
CC -----
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CC -----
DR EMBL; AF001287; AAB69125.1; -
DR EMBL; AF001286; AAB69124.1; -
DR EMBL; AF016619; AAC53375.1; -
DR MGB; MGI:97282; Ncam2.
DR InterPro; IPR003961; FN III.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003598; Ig C2.
DR InterPro; IPR003006; Ig_MHC.
DR Pfam; PF00041; fn3; 2.
DR Pfam; PF00047; ig; 5.
DR SMART; SM00060; FN3; 2.
DR SMART; SM00408; IGC2; 5.
DR PROSITE; PS00835; IG LIKE; 5.
DR Cell adhesion; Transmembrane; Glycoprotein; Repeat;
DR Immunoglobulin domain; Signal; GPI-anchor; Alternative splicing.
KW SIGNAL 1 19
FT CHAIN 20 837
FT DOMAIN 20 697
FT TRANSMEM 698 718
FT DOMAIN 719 837
FT DOMAIN 21 108
FT DOMAIN 113 202
FT DOMAIN 208 297
FT DOMAIN 302 396
FT DOMAIN 401 491
FT DOMAIN 482 581
FT DOMAIN 594 678
FT DISULFID 42 93
FT DISULFID 136 186
FT DISULFID 232 281
FT DISULFID 322 380
FT DISULFID 422 475
FT CARBOHYD 177 177
FT CARBOHYD 219 219
FT CARBOHYD 309 309
FT CARBOHYD 406 406
FT CARBOHYD 419 419
FT CARBOHYD 445 445
FT CARBOHYD 474 474
FT CARBOHYD 562 562
FT VARSPLIC 694 837
TLFNGLGAIIGLVAAALLLVTVDSVFFIRQCGLLMC
ITRMCKGSGSGKSEEGKAAYLKDSKEPIVMRTE
DIRTNHEDGSPVNEPTPLTEPKLKEKNGEVINA
ETIEIKVNDIIOSKEDDIRA -> NCCANKGNGGOSWH
LNAVGTFTVITMSICLP (in isoform Short).
/FTId=VSP_002590.
SQ SEQUENCE 837 AA; 93203 MW; 70473B053A2D65A5 CRC64;

Query Match 10.5%; Score 159.5; DB 1; Length 837;
Best Local Similarity 29.7%; Pred. No. 1e-05;
Matches 47; Conservative 34; Mismatches 58; Indels 19; Gaps 7;

Qy 69 SVSFVYQQTLOGDFKRR-AEMIDFNIRKNVTRSDAGKYRC--VSAPSEQQONLEEDT 125
Db 145 AVSWLYHNEEVTIPDNRFAVLANNLNILNINKSDGIVRCGRVEARGE----IDFRD 200
Qy 126 VTLEVLVAPAV--PSCEVPSSALSGTVVELRQDKGEGNPAPEYTFWKDGIRLLENPRIGS 183
Db 201 IIVIVNPPAIMMPQKSFNATARGBEMTLTCK-ASGSPDPTISWFRNGRLIBENEKYIL 259
Qy 184 QSTNSYVWNTKTGTTLQFNTVSKLDTGBYSCEARNSVG 221

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Db      260 KGSNTLTVR-----NIINK-DGGSYVCKATNKAG 288
: : : : : : : : : : : : : : : : : : : : : : : : : :
RESULT 13
NRG2_RAT
ID      NRG2_RAT
AC      STANDARD; PRT; 868 AA.
DT      035569; 035073; 035570; 035571; 035572;
DT      15-DEC-1998 (Rel. 37, Created)
DT      15-DEC-1998 (Rel. 37, Last sequence update)
DT      15-SEP-2003 (Rel. 42, Last annotation update)
DE      Pro-neuregulin-2 precursor (Pro-NRG2) [Contains: Neuregulin-2 (NRG-2)
DE      (Neural- and thymus-derived activator for ERBB kinases) (NTAK)].
GN      NRG2 OR NTAK.
OS      Rattus norvegicus (Rat).
OC      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC      Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX      NCBI_TaxID=10116;
RN      [1]
RP      SEQUENCE FROM N.A., SEQUENCE OF 128-162, AND ALTERNATIVE SPLICING.
RX      MEDLINE=98006324; PubMed=9348101;
RA      Higashiyama S., Horikawa M., Yamada K., Ichino N., Nakano N.,
RA      Nakagawa T., Miyagawa J., Matsushita N., Nagatsu T., Taniguchi N.,
RA      Ishiguro H.;
RT      "A novel brain-derived member of the epidermal growth factor family
RT      that interacts with ErbB3 and ErbB4.";
RL      J. Biochem. 122:675-680(1997).
RN      [2]
RP      SEQUENCE OF 109-868 FROM N.A. (ISOFORMS 6 AND 7).
RC      TISSUE=Cerebellum;
RX      MEDLINE=97311397; PubMed=9168114;
RA      Chang H., Riese D.J. II, Gilbert W., Stern D.F., McMahon U.J.;
RT      "Ligands for ErbB-family receptors encoded by a neuregulin-like
RT      gene.";
RL      Nature 387:509-512(1997).
CC      -!- FUNCTION: DIRECT LIGAND FOR ERBB3 AND ERBB4 TYROSINE KINASE
CC      RECEPTORS. CONCOMITANTLY RECRUITS ERBB1 AND ERBB2 CORECEPTORS.
CC      RESULTING IN LIGAND-STIMULATED TYROSINE PHOSPHORYLATION AND
CC      ACTIVATION OF THE ERBB RECEPTORS. MAY ALSO PROMOTE THE
CC      HETERODIMERIZATION WITH THE EGF RECEPTOR.
CC      -!- SUBCELLULAR LOCATION: EXISTS AS AN TYPE I MEMBRANE PROTEIN AND AS
CC      A PROTEOLYTICALLY RELEASED SOLUBLE GROWTH FACTOR FORM. THE
CC      MEMBRANE-BOUND FORM DOES NOT SEEM TO BE ACTIVE (BY SIMILARITY).
CC      -!- ALTERNATIVE PRODUCTS:
CC      Event=Alternative splicing; Named isoforms=7;
CC      Comment=Additional isoforms seem to exist. The alpha-type and
CC      beta-type differ in the EGF-LIKE domain;
CC      Name=1; Synonyms=NTAK-alpha1;
CC      IsoId=O35569-1; Sequence=Displayed;
CC      Name=2; Synonyms=NTAK-alpha2A;
CC      IsoId=O35569-2; Sequence=VSP_003471;
CC      Name=3; Synonyms=NTAK-alpha2B, NTAK-alpha2-1P;
CC      IsoId=O35569-3; Sequence=VSP_003466, VSP_003471;
CC      Name=4; Synonyms=NTAK-beta;
CC      IsoId=O35569-4; Sequence=VSP_003470;
CC      Name=5; Synonyms=NTAK-gamma;
CC      IsoId=O35569-5; Sequence=VSP_003467, VSP_003468;
CC      Name=6; Synonyms=NRG2-alpha;
CC      IsoId=O35569-6; Sequence=VSP_003472, VSP_003473;
CC      Name=7; Synonyms=NRG2-beta;
CC      IsoId=O35569-7; Sequence=VSP_003465, VSP_003469;
CC      -!- TISSUE SPECIFICITY: EXPRESSED IN MOST PARTS OF THE BRAIN,
CC      ESPECIALLY THE OLFACTORY BULB AND CEREBELLUM WHERE IT LOCALIZES IN
CC      GRANULE AND PURKINJE CELLS. IN THE HIPPOCAMPUS, FOUND IN THE
CC      GRANULE CELLS OF THE DENTATE GYRUS. IN THE BASAL FOREBRAIN, FOUND
CC      IN THE CHOLINERGIC CELLS. IN THE HINDBRAIN, WEAKLY DETECTABLE IN
CC      THE MOTOR TRIGEMINAL NUCLEUS. NOT DETECTED IN THE HYPOTHALAMUS.
CC      ALSO FOUND IN THE LIVER AND IN THE THYMUS. NOT DETECTED IN HEART,
CC      ADRENAL GLAND, OR TESTIS.
CC      -!- DEVELOPMENTAL STAGE: IN THE EMBRYO, EXPRESSED IN THE BRAIN OF
CC      E11.5 EMBRYOS WHERE IT IS FOUND IN THE TELENCEPHALON, BUT NOT IN
CC      THE HINDBRAIN. NOT FOUND IN THE HEART. IN THE ADULT, FOUND IN
CC      BRAIN AND THYMUS.

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-!- DOMAIN: THE CYTOPLASMIC DOMAIN MAY BE INVOLVED IN THE REGULATION OF TRAFFICKING AND PROTEOLYTIC PROCESSING. REGULATION OF THE PROTEOLYTIC PROCESSING INVOLVES INITIAL INTRACELLULAR DOMAIN DIMERIZATION (BY SIMILARITY).
 -!- DOMAIN: ERBB RECEPTOR BINDING IS ELICITED ENTIRELY BY THE EGF-LIKE DOMAIN (BY SIMILARITY).
 -!- PTM: PROTEOLYTIC CLEAVAGE CLOSE TO THE PLASMA MEMBRANE ON THE EXTERNAL FACE LEADS TO THE RELEASE OF THE SOLUBLE GROWTH FACTOR FORM (BY SIMILARITY).
 -!- PTM: EXTENSIVE GLYCOSYLATION PRECEDES THE PROTEOLYTIC CLEAVAGE (BY SIMILARITY).
 -!- SIMILARITY: Contains 1 EGF-like domain.
 -!- SIMILARITY: Contains 1 immunoglobulin-like C2-type domain.
 -!- SIMILARITY: BELONGS TO THE NEUREGULIN FAMILY.

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CC	EMBL; D89995; BAA23344.1; -	DR	EMBL; D89995; BAA23344.1; -	CC	EMBL; D89995; BAA23344.1; -
CC	EMBL; D89996; BAA23345.1; -	DR	EMBL; D89996; BAA23345.1; -	CC	EMBL; D89996; BAA23345.1; -
CC	EMBL; D89997; BAA23346.1; -	DR	EMBL; D89997; BAA23346.1; -	CC	EMBL; D89997; BAA23346.1; -
CC	EMBL; D89998; BAA23347.1; -	DR	EMBL; D89998; BAA23347.1; -	CC	EMBL; D89998; BAA23347.1; -
CC	EMBL; AB001576; BAA23348.1; -	DR	EMBL; AB001576; BAA23348.1; -	CC	EMBL; AB001576; BAA23348.1; -
CC	PIR; JCS701; JCS701.	DR	PIR; JCS701; JCS701.	CC	PIR; JCS701; JCS701.
CC	HSSP; Q12784; LHRE.	DR	HSSP; Q12784; LHRE.	CC	HSSP; Q12784; LHRE.
CC	InterPro; IPR006209; EGF like.	DR	InterPro; IPR006209; EGF like.	CC	InterPro; IPR006209; EGF like.
CC	InterPro; IPR006210; IEGF.	DR	InterPro; IPR006210; IEGF.	CC	InterPro; IPR006210; IEGF.
CC	InterPro; IPR007110; Ig-like.	DR	InterPro; IPR007110; Ig-like.	CC	InterPro; IPR007110; Ig-like.
CC	InterPro; IPR003598; Ig_c2.	DR	InterPro; IPR003598; Ig_c2.	CC	InterPro; IPR003598; Ig_c2.
CC	InterPro; IPR003006; Ig_MHC.	DR	InterPro; IPR003006; Ig_MHC.	CC	InterPro; IPR003006; Ig_MHC.
CC	Pfam; PF00008; EGF_1.	DR	Pfam; PF00008; EGF_1.	CC	Pfam; PF00008; EGF_1.
CC	Pfam; PF00047; ig; 1.	DR	Pfam; PF00047; ig; 1.	CC	Pfam; PF00047; ig; 1.
CC	Pfam; PF02158; Neuregulin; 1.	DR	Pfam; PF02158; Neuregulin; 1.	CC	Pfam; PF02158; Neuregulin; 1.
CC	SMART; SM00181; EGF; 1.	DR	SMART; SM00181; EGF; 1.	CC	SMART; SM00181; EGF; 1.
CC	PROSITE; PS00048; IGC2; 1.	DR	PROSITE; PS00048; IGC2; 1.	CC	PROSITE; PS00048; IGC2; 1.
CC	PROSITE; PS00022; EGF_1; 1.	DR	PROSITE; PS00022; EGF_1; 1.	CC	PROSITE; PS00022; EGF_1; 1.
CC	PROSITE; PS01186; EGF_2; 1.	DR	PROSITE; PS01186; EGF_2; 1.	CC	PROSITE; PS01186; EGF_2; 1.
CC	PROSITE; PS00835; IG_LIKE; 1.	DR	PROSITE; PS00835; IG_LIKE; 1.	CC	PROSITE; PS00835; IG_LIKE; 1.
CC	Growth factor; EGF-like domain; Immunoglobulin domain; Glycoprotein;	CC	Growth factor; EGF-like domain; Immunoglobulin domain; Glycoprotein;	CC	Growth factor; EGF-like domain; Immunoglobulin domain; Glycoprotein;
CC	Transmembrane; Multigene family; Alternative splicing.	CC	Transmembrane; Multigene family; Alternative splicing.	CC	Transmembrane; Multigene family; Alternative splicing.
CC	PROPEP 1 127	CC	PROPEP 1 127	CC	PROPEP 1 127
CC	CHAIN 128 868	CC	CHAIN 128 868	CC	CHAIN 128 868
CC	NEUREGULIN-2, MEMBRANE-BOUND FORM.	CC	NEUREGULIN-2, MEMBRANE-BOUND FORM.	CC	NEUREGULIN-2, MEMBRANE-BOUND FORM.
CC	EXTRACELLULAR (POTENTIAL).	CC	EXTRACELLULAR (POTENTIAL).	CC	EXTRACELLULAR (POTENTIAL).
CC	INTERNAL SIGNAL SEQUENCE (POTENTIAL).	CC	INTERNAL SIGNAL SEQUENCE (POTENTIAL).	CC	INTERNAL SIGNAL SEQUENCE (POTENTIAL).
CC	CYTOPLASMIC (POTENTIAL).	CC	CYTOPLASMIC (POTENTIAL).	CC	CYTOPLASMIC (POTENTIAL).
CC	IG-LIKE C2-TYPE.	CC	IG-LIKE C2-TYPE.	CC	IG-LIKE C2-TYPE.
CC	SER/THR-RICH.	CC	SER/THR-RICH.	CC	SER/THR-RICH.
CC	EGF-LIKE.	CC	EGF-LIKE.	CC	EGF-LIKE.
CC	POLY-SER.	CC	POLY-SER.	CC	POLY-SER.
CC	POLY-SER.	CC	POLY-SER.	CC	POLY-SER.
CC	POLY-THR.	CC	POLY-THR.	CC	POLY-THR.
CC	POLY-ALA.	CC	POLY-ALA.	CC	POLY-ALA.
CC	POLY-PRO.	CC	POLY-PRO.	CC	POLY-PRO.
CC	BY SIMILARITY.	CC	BY SIMILARITY.	CC	BY SIMILARITY.
CC	BY SIMILARITY.	CC	BY SIMILARITY.	CC	BY SIMILARITY.
CC	BY SIMILARITY.	CC	BY SIMILARITY.	CC	BY SIMILARITY.
CC	N-LINKED (GLCNAC. . .) (POTENTIAL).	CC	N-LINKED (GLCNAC. . .) (POTENTIAL).	CC	N-LINKED (GLCNAC. . .) (POTENTIAL).
CC	N-LINKED (GLCNAC. . .) (POTENTIAL).	CC	N-LINKED (GLCNAC. . .) (POTENTIAL).	CC	N-LINKED (GLCNAC. . .) (POTENTIAL).
CC	N-LINKED (GLCNAC. . .) (POTENTIAL).	CC	N-LINKED (GLCNAC. . .) (POTENTIAL).	CC	N-LINKED (GLCNAC. . .) (POTENTIAL).
CC	N-LINKED (GLCNAC. . .) (POTENTIAL).	CC	N-LINKED (GLCNAC. . .) (POTENTIAL).	CC	N-LINKED (GLCNAC. . .) (POTENTIAL).
CC	Missing (in isoform 7).	CC	Missing (in isoform 7).	CC	Missing (in isoform 7).
CC	/FTID=VSP_003465.	CC	/FTID=VSP_003465.	CC	/FTID=VSP_003465.
CC	PLV -> FFF (in isoform 3).	CC	PLV -> FFF (in isoform 3).	CC	PLV -> FFF (in isoform 3).
CC	VARSPLIC 220 222	CC	VARSPLIC 220 222	CC	VARSPLIC 220 222

EMBO J. 9:2399-2407(1990).

-1- FUNCTION: IT IS POSSIBLE THAT DLAR IS A CELL ADHESION RECEPTOR. IT POSSESSES AN INTRINSIC PROTEIN TYROSINE PHOSPHATASE ACTIVITY (PTPASE).

-1- FUNCTION: THE FIRST PTPASE DOMAIN HAS ENZYMACTIC ACTIVITY, WHILE THE SECOND ONE SEEMS TO AFFECT THE SUBSTRATE SPECIFICITY OF THE FIRST ONE.

-1- CATALYTIC ACTIVITY: Protein tyrosine phosphate + H(2)O = protein tyrosine + phosphate.

-1- SUBCELLULAR LOCATION: Type I membrane protein.

-1- SIMILARITY: Contains 3 immunoglobulin-like C2-type domains.

-1- SIMILARITY: Contains 8 fibronectin type III domains.

-1- SIMILARITY: Contains 2 protein-tyrosine phosphatase domains.

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EMBL: Y00815; CAA68754.1; --

PIR: S03841; TDHULK.

PDB: ILAR; 25-APR-00.

Genew: HGNC:9670; PTPRF.

MIM: 179590; --

GO: GO:0005887; C:integral to plasma membrane; TAS.

GO: GO:0005001; F:transmembrane receptor protein tyrosine pho. . ; TAS.

GO: GO:0007155; P:cell adhesion; TAS.

GO: GO:0007185; P:transmembrane receptor protein tyrosine pho. . ; TAS.

InterPro: IPR003961; FN III.

InterPro: IPR003962; FNIII subd.

InterPro: IPR007110; Ig-like.

InterPro: IPR003598; Ig_c2.

InterPro: IPR003006; Ig_MHC.

InterPro: IPR000387; TYR_phosphatase.

InterPro: IPR000242; Tyr_PP.

Pfam: PF00041; fn3; 7.

Pfam: PF00047; ig; 3.

Pfam: PF00102; Y_phosphatase; 2.

PRINTS: PR00014; ENTPEIII.

PRINTS: PR00700; PRTYPHPTASE.

SMART: SM00060; FN3; 4.

SMART: SM00194; PTPc; 2.

PROSITE: PS50835; IG_LIKE; 3.

PROSITE: PS00383; TYR_PHOSPHATASE_1; 2.

PROSITE: PS50056; TYR_PHOSPHATASE_2; 2.

PROSITE: PS50055; TYR_PHOSPHATASE_PTP; 2.

KW Hydrolase; Receptor; Glycoprotein; Signal; Transmembrane;

KW Cell adhesion; Immunoglobulin domain; Repeat; 3D-structure.

SIGNAL 1 16 POTENTIAL.

FT CHAIN 17 1897 LAR PROTEIN.

FT TRANSMEM 17 1250 EXTRACELLULAR (POTENTIAL).

FT DOMAIN 1251 1274 POTENTIAL.

FT DOMAIN 1275 1897 CYTOPLASMIC (POTENTIAL).

FT DOMAIN 23 113 IG-LIKE C2-TYPE 1.

FT DOMAIN 125 214 IG-LIKE C2-TYPE 2.

FT DOMAIN 222 304 IG-LIKE C2-TYPE 3.

FT DOMAIN 1360 1606 PROTEIN-TYROSINE PHOSPHATASE 1.

FT DOMAIN 1649 1897 PROTEIN-TYROSINE PHOSPHATASE 2.

FT ACT_SITE 1538 1538 BY SIMILARITY.

FT ACT_SITE 1829 1829 BY SIMILARITY.

FT CARBOHYD 107 107 N-LINKED (GLCNAC. . .) (POTENTIAL).

FT CARBOHYD 240 240 N-LINKED (GLCNAC. . .) (POTENTIAL).

FT CARBOHYD 285 285 N-LINKED (GLCNAC. . .) (POTENTIAL).

FT CARBOHYD 711 711 N-LINKED (GLCNAC. . .) (POTENTIAL).

FT CARBOHYD 956 956 N-LINKED (GLCNAC. . .) (POTENTIAL).

FT MUTAGEN 1538 1538 C->S: LOSS OF ACTIVITY.

SQ SEQUENCE 1897 AA; 211844 MW; 439850F1D5C031FF CRC64;

Query Match 10.3%; Score 156; DB 1; Length 1897;

Search completed: December 9, 2003, 17:11:45
Job time : 11.8641 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:08:46 ; Search time 32.1882 Seconds
(without alignments)
2389.068 Million cell updates/sec

Title: US-09-852-797-76

Perfect score: 1521

Sequence: 1 MARRSRHRLLLRLYLVA.....SSKATTSENDPKTKSFII 298

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 830525 seqs, 258052604 residues

Total number of hits satisfying chosen parameters: 830525

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

SPTREMBL.23.*

- 1: sp_archaea.*
- 2: sp_bacteria.*
- 3: sp_fungi.*
- 4: sp_human.*
- 5: sp_invertebrate.*
- 6: sp_mammal.*
- 7: sp_mhc.*
- 8: sp_organelle.*
- 9: sp_phase.*
- 10: sp_plant.*
- 11: sp_rodent.*
- 12: sp_virus.*
- 13: sp_vertebrate.*
- 14: sp_unclassified.*
- 15: sp_rvirus.*
- 16: sp_bacteriap.*
- 17: sp_archaeap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	1215	79.9	298	11	Q9J159	Q9J159 mus musculus
2	1212	79.7	298	11	Q8CE95	Q8CE95 mus musculus
3	1212	79.7	298	11	Q8CE95	Q8CE95 mus musculus
4	507.5	33.4	181	11	Q9CWD9	Q9CWD9 mus musculus
5	499	32.8	310	11	Q9D8B7	Q9D8B7 mus musculus
6	499	32.8	310	11	Q9EPK4	Q9EPK4 mus musculus
7	496	32.6	310	11	Q9D1M9	Q9D1M9 mus musculus
8	481	31.6	310	4	Q9BX67	Q9BX67 homo sapien
9	481	31.6	355	4	Q8WHL8	Q8WHL8 homo sapien
10	480	31.6	309	4	Q96FL1	Q96FL1 homo sapien
11	421	27.7	300	11	Q8VC39	Q8VC39 mus musculus
12	409.5	26.9	300	11	Q9JHY1	Q9JHY1 rattus norv
13	393.5	25.9	259	4	Q9Y5B2	Q9Y5B2 homo sapien
14	315.5	20.7	173	11	Q9JKD5	Q9JKD5 rattus norv
15	227	14.9	318	13	Q91664	Q91664 xenopus lae
16	225	14.8	335	13	Q9PWR4	Q9PWR4 gallus gall

ALIGNMENTS

RESULT 1

ID	Q9J159	PRELIMINARY;	PRT;	298 AA.
AC	Q9J159;			
DT	01-OCT-2000 (TREMBLrel. 15, Created)			
DT	01-OCT-2000 (TREMBLrel. 15, Last sequence update)			
DT	01-MAR-2003 (TREMBLrel. 23, Last annotation update)			
DE	Vascular endothelial junction-associated molecule (Junctional adhesion molecule-3) (2410030G21RIK protein).			
GN	JCAM3 OR JCAM2 OR JAM-3 OR 2410030G21RIK.			
OS	Mus musculus (Mouse).			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.			
OX	NCBI_TaxID=10090;			
RN	[1]			
RP	SEQUENCE FROM N.A.			
RC	STRAIN=C57BL/6J;			
RX	MEDLINE=20317114; PubMed=10779521;			
RA	Palmeri D., van Zante A., Huang C.-C., Hemmerich S., Rosen S.D.,			
RT	"Vascular Endothelial Junction-associated Molecule, a Novel Member of the Immunoglobulin Superfamily, Is Localized to Intercellular			
RT	Boundaries of Endothelial Cells.";			
RL	J. Biol. Chem. 275:19139-19145(2000).			
RN	[2]			
RP	SEQUENCE FROM N.A.			
RX	PubMed=11036763;			
RA	Aurand-Lions M.A., Duncan L., Du Pasquier L., Imhof B.A.;			
RT	"Cloning of JAM-2 and JAM-3: an Emerging Junctional Adhesion Molecular Family?";			
RL	Curr. Top. Microbiol. Immunol. 251:91-98(2000).			
RN	[3]			
RP	SEQUENCE FROM N.A.			
RC	STRAIN=C57BL/6J; TISSUE=Embryo, and Embryonic stem cells;			
RX	MEDLINE=21085660; PubMed=11217851;			
RA	Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,			
RA	Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,			
RA	Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamana K. I.,			
RA	Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,			
RA	Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,			

17	224	14.7	335	13	Q9YGH1	Q9YGH1 gallus gall
18	221	14.5	319	11	Q922D5	Q922D5 mus musculus
19	219	14.4	319	11	Q9JKA5	Q9JKA5 mus musculus
20	219	14.4	335	13	Q9YGV5	Q9YGV5 gallus gall
21	217	14.3	181	13	Q91665	Q91665 xenopus lae
22	210	13.8	259	4	Q95532	Q95532 homo sapien
23	205.5	13.5	319	6	Q9YTU80	Q9YTU80 canis famil
24	202	13.3	390	4	Q96T50	Q96T50 homo sapien
25	202	13.3	390	4	Q96AP7	Q96AP7 homo sapien
26	201.5	13.2	365	6	Q8MWV3	Q8MWV3 bos taurus
27	201.5	13.2	394	11	Q925F2	Q925F2 mus musculus
28	197	13.0	407	11	Q9D2J4	Q9D2J4 mus musculus
29	195.5	12.9	344	4	Q9UKV4	Q9UKV4 homo sapien
30	195	12.8	390	6	Q95KI3	Q95KI3 macaca fasc
31	194	12.8	372	13	Q90Y50	Q90Y50 brachydanio
32	191	12.6	319	6	Q9TU79	Q9TU79 sus scrofa
33	188	12.4	430	4	Q8N4F1	Q8N4F1 homo sapien
34	186	12.2	773	5	Q8IRS5	Q8IRS5 drosophila
35	183	12.0	300	11	Q9DA22	Q9DA22 mus musculus
36	183	12.0	300	11	Q9D9J0	Q9D9J0 mus musculus
37	180	11.8	352	11	Q91W66	Q91W66 mus musculus
38	180	11.8	365	11	Q9DBJ8	Q9DBJ8 mus musculus
39	179.5	11.8	304	11	Q9CVA4	Q9CVA4 mus musculus
40	179.5	11.8	323	4	Q8NDD2	Q8NDD2 homo sapien
41	177	11.6	284	4	Q9NX42	Q9NX42 homo sapien
42	177	11.6	325	4	Q95791	Q95791 homo sapien
43	177	11.6	327	4	Q96IQ7	Q96IQ7 homo sapien
44	177	11.6	344	11	Q9R067	Q9R067 rattus norv
45	177	11.6	358	11	Q9R066	Q9R066 rattus norv

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RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Kuehl P., Lewis S., Matsuura Y., Nikaido I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Lyons P., Marchionni L., Maehima J., Mazzarelli J., Mombaerts P.,
RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Sato K., Schoenbach C., Seya K., Shibata Y., Storch K.-F.,
RA Suzuki H., Toyooka K., Wang K.H., Weitz K., Whittaker C., Wilming L.,
RA Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
RA Hayashizaki Y.;
RT "Functional annotation of a full-length mouse cDNA collection.";
RL Nature 409:685-690(2001).
DR EMBL; AF255911; AAF81224.1; -.
DR EMBL; AJ291757; CAC20699.1; -.
DR EMBL; AK013914; BAB29053.1; -.
DR EMBL; AK010616; BAB27064.1; -.
DR MGD; MGI:1933820; Jcam3.
DR MGD; MGI:1933825; Jcam3.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003006; Ig_MHC.
DR Pfam; PF00047; Ig; 2.
DR PROSITE; PS50835; IG_LIKE; 2.
SQ SEQUENCE 298 AA; 33047 MW; 1124E0F07E6CF751 CRC64;

Query Match 79.9%; Score 1215; DB 11; Length 298;
Best Local Similarity 78.6%; Pred. No. 1.9e-104;
Matches 235; Conservative 25; Mismatches 37; Indels 2; Gaps 2;

Qy 1 MARRSRHRLLLRLYLVALGYHKA YGFSAPKD-QQVTVAVXQOEAILACKTPKKT VXS 59
Db 1 MARSPOGLMLLLHLHYLVALDYHKANGFSASKDHRQEVTVIEFQEAILACKTPKKTSS 60

Qy 60 RLEWKKLGRSVSFVYQQTLQGD FPKNRAEMIDFNIRIKNVT RSDAGKYRCEVSAPS EQG 119
Db 61 RLEWKVGGVSLVYQQALQGD FPKRAEMIDFNIRIKNVT RSDAGBYRCEVSAPT EQG 120

Qy 120 NLEEDTVTLVLVAPVPCEVPSSALSGTVVELRCQDKEGNPAPEYTFWKDGIRLLENP 179
Db 121 NLQEDKWLVLVAPVACEVPTSVMTGVSVELRCQDKEGNPAPEYTFWKDGIRLLENP 180

Qy 180 RLGSQSTNSSTYNTKGTLOFN TVSKLDTGEYSCEARN SVGVRCPGKRMQVDVLN ISG 239
Db 181 K-GRTHNNSSTYNTKSGILQFN MISKMDSGEY YCEARN SVGHRRCPCGKRMQVDVLN ISG 239

Qy 240 IIAAVVVVALVISVCGLGVCYAQRKG YFSKTSFKQSNSSSKAT TMSNDPKHTKSFII 298
Db 240 IIAATVVVAVFISVCGLGTCYAQRKG YFSKTSFKQSGPASKVTTMSENDPKHTKSFII 298

RESULT 2
Q8CE95 PRELIMINARY; PRT; 298 AA.
AC Q8CE95;
DT 01-MAR-2003 (TrEMBLrel. 23, Created)
DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
DE Junction cell adhesion molecule 2.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Medulla oblongata;
RX MEDLINE=22354683; PubMed=12466851;
RA The FANTOM Consortium,
RA the RIKEN Genome Exploration Research Group Phase I & II Team;
RT "Analysis of the mouse transcriptome based on functional annotation of
RT 60,770 full-length cDNAs.";
RL Nature 420:563-573(2002).
DR EMBL; AK078128; BAC37139.1; -.
SQ SEQUENCE 298 AA; 33182 MW; 1131F0BF89CEB51 CRC64;

Query Match 79.7%; Score 1212; DB 11; Length 298;
Best Local Similarity 78.6%; Pred. No. 3.5e-104;
Matches 235; Conservative 25; Mismatches 37; Indels 2; Gaps 2;

Qy 1 MARRSRHRLLLRLYLVALGYHKA YGFSAPKD-QQVTVAVXQOEAILACKTPKKT VXS 59
Db 1 MARSPOGLMLLLHLHYLVALDYHKANGFSASKDHRQEVTVIEFQEAILACKTPKKTSS 60

Qy 60 RLEWKKLGRSVSFVYQQTLQGD FPKNRAEMIDFNIRIKNVT RSDAGKYRCEVSAPS EQG 119
Db 61 RLEWKVGGVSLVYQQALQGD FPKRAEMIDFNIRIKNVT RSDAGBYRCEVSAPT EQG 120

Qy 120 NLEEDTVTLVLVAPVPCEVPSSALSGTVVELRCQDKEGNPAPEYTFWKDGIRLLENP 179
Db 121 NLQEDKWLVLVAPVACEVPTSVMTGVSVELRCQDKEGNPAPEYTFWKDGIRLLENP 180

Qy 180 RLGSQSTNSSTYNTKGTLOFN TVSKLDTGEYSCEARN SVGVRCPGKRMQVDVLN ISG 239
Db 181 K-GRTHNNSSTYNTKSGILQFN MISKMDSGEY YCEARN SVGHRRCPCGKRMQVDVLN ISG 239

Qy 240 IIAAVVVVALVISVCGLGVCYAQRKG YFSKTSFKQSNSSSKAT TMSNDPKHTKSFII 298
Db 240 IIAATVVVAVFISVCGLGTCYAQRKG YFSKTSFKQSGPASKVTTMSENDPKHTKSFII 298

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QY 230 MOVDDLNISGIIAAVVVVVALVSVGLGVCYAKRGYF--SKE-----TSFQKSNSSSKA 282
Db 235 MEVYDLNIAIGLGGVLLVILVAVITMGICCAAYRRGCFISSKQDGESYKSPGKHGVDNYI 294
QY 283 TTMSNDPFRHTKSFII 298
Db 295 RTSEEGDFRHKSSFVI 310

RESULT 6
Q9EPK4
ID Q9EPK4 PRELIMINARY; PRT; 310 AA.
AC Q9EPK4;
DT 01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT 01-MAR-2001 (TrEMBLrel. 23, Last annotation update)
DE Functional adhesion molecule-2, JAM-2 (1110002N23Rik protein)
DE (Junctional cell adhesion molecule 3).
GN JCAM3 OR JCAM2 OR JAM-2 OR 1110002N23RIK.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RX PubMed=11036763;
RA Aurand-Lions M.A., Duncan L., Du Pasquier L., Imhof B.A.;
RT "Cloning of JAM-2 and JAM-3: an Emerging Junctional Adhesion Molecular
RL Family";
RL Curr. Top. Microbiol. Immunol. 251:91-98 (2000).
[2]
RP SEQUENCE FROM N.A.
RX STRAIN=C57BL/6J; TISSUE=Embryo;
RC MEDLINE=21085660; PubMed=11217851;
RA Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
RA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boiffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Suzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
RA Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohsaki S.,
RA Hayashizaki Y.;
RT "Functional annotation of a full-length mouse cDNA collection.";
RL Nature 409:685-690 (2001).
[3]
RP SEQUENCE FROM N.A.
RX STRAIN=C57BL/6J; TISSUE=Mesonephros;
RC MEDLINE=22354683; PubMed=12466851;
RA TISSUE=Kidney;
RA Strausberg R.;
RL Submitted (MAR-2002) to the EMBL/GenBank/DBJ databases.
[4]
RP SEQUENCE FROM N.A.
RX STRAIN=C57BL/6J; TISSUE=Mesonephros;
RC MEDLINE=22354683; PubMed=12466851;
RA The FANTOM Consortium,
RA the RIKEN Genome Exploration Research Group Phase I & II Team;
RT "Analysis of the mouse transcriptome based on functional annotation of
RT 60,770 full-length cDNAs.";
RL Nature 420:563-573 (2002).
DR EMBL; AJ300304; CAC20704.1; -
DR EMBL; AK013156; BAB28683.1; -
DR EMBL; BC024357; AAH24357.1; -
DR EMBL; AK032833; BAC28049.1; -

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DR MGD; MGI:1933820; Jcam2.
DR MGD; MGI:1933825; Jcam3.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003598; Ig_c2.
DR Pfam; PF00047; Ig_MHC.
DR SMART; SM00408; IGC2; 1.
DR PROSITE; PS00835; IG_LIKE; 2.
KW Immunoglobulin domain.
SQ SEQUENCE 310 AA; 34837 MW; 4B92BCB51D0A4B0A CRC64;

Query Match 32.8%; Score 499; DB 11; Length 310;
Best Local Similarity 37.0%; Pred. No. 5.4e-38;
Matches 117; Conservative 61; Mismatches 112; Indels 26; Gaps 9;

QY 1 MARSRHRL-----LILLRLYLVALGVHKGAFSPKDDQVVTAVYQEOAILAC-K 51
Db :|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
3 LSRLRLRLYLARLPDFLFLLLFRGCM-----EAVNLKSSNRNPVH--EFSEVELSCII 55

QY 52 TPKKTVA SRLWKKL-GRSVSVFVYQQTLOGDFKNRAEMI-DFNIRIKNVTSTRDAGKYRC 109
Db :|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
56 TDSQTSDFRIEWKIKQGGQTTTVYFDNKIQDLAGRTDVFQKTSRLRWNVTRSDAIYRC 115

QY 110 EVSAPSEGGQNLLEDVTTLVLVAPAVPSCEVPSALSSTGTVVELRCQDKGNPAPEYTW 169
Db |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
116 EVVALNDR-KEVDRIITIELIVQVKPVTVCRIPAAPVPGKTATLQCCSEGYPRPHYSWY 174

QY 170 KDGRLLENPLGQSSTNSSTMTTKTGTLOFNTVSKLDTGEYSCEARNVGVYRCPOKR 229
Db :|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
175 RNDVPLPTDSRANPRFQNSSFHVNSETGTLVFNVAHVHKDDSQYVCIASNDAGAACCEQD 234

QY 230 MOVDDLNISGIIAAVVVVVALVSVGLGVCYAKRGYF--SKE-----TSFQKSNSSSKA 282
Db :|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
235 MEVYDLNIAIGLGGVLLVILVAVITMGICCAAYRRGCFISSKQDGESYKSPGKHGVDNYI 294

QY 283 TTMSNDPFRHTKSFII 298
Db |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
295 RTSEEGDFRHKSSFVI 310

RESULT 7
ID Q9D1M9 PRELIMINARY; PRT; 310 AA.
AC Q9D1M9;
DT 01-JUN-2001 (TrEMBLrel. 17, Created)
DT 01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE 1110002N23Rik protein.
GN JCAM3 OR JCAM2 OR 1110002N23RIK.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RX STRAIN=C57BL/6J; TISSUE=Embryo;
RC MEDLINE=21085660; PubMed=11217851;
RA Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
RA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boiffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Suzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
RA Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohsaki S.,
RA Hayashizaki Y.;
RT "Functional annotation of a full-length mouse cDNA collection.";
RL Nature 409:685-690 (2001).
[3]
RP SEQUENCE FROM N.A.
RX STRAIN=C57BL/6J; TISSUE=Mesonephros;
RC MEDLINE=22354683; PubMed=12466851;
RA TISSUE=Kidney;
RA Strausberg R.;
RL Submitted (MAR-2002) to the EMBL/GenBank/DBJ databases.
[4]
RP SEQUENCE FROM N.A.
RX STRAIN=C57BL/6J; TISSUE=Mesonephros;
RC MEDLINE=22354683; PubMed=12466851;
RA The FANTOM Consortium,
RA the RIKEN Genome Exploration Research Group Phase I & II Team;
RT "Analysis of the mouse transcriptome based on functional annotation of
RT 60,770 full-length cDNAs.";
RL Nature 420:563-573 (2002).
DR EMBL; AJ300304; CAC20704.1; -
DR EMBL; AK013156; BAB28683.1; -
DR EMBL; BC024357; AAH24357.1; -
DR EMBL; AK032833; BAC28049.1; -

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RA Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
RA Hayaahizaki Y.,
RA "Functional annotation of a full-length mouse cDNA collection.";
RL Nature 409:685-690(2001).
DR EMBL; AK003326; BAB2215.1; -.
DR MGD; MGI:1933825; Jcam3.
DR GCD; MGI:1933825; Jcam3.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003598; Ig_c2.
DR Pfam; PF00047; Ig; 2.
DR SMART; SM00408; Igc2; 1.
DR PROSITE; PS50835; IG_LIKE; 2.
KW Immunoglobulin domain.
SQ SEQUENCE 310 AA; 34819 MW; 6692BCAD68EA4B1D CRC64;

Query Match 32.6%; Score 496; DB 11; Length 310;
Best Local Similarity 37.0%; Pred. No. 1e-37;
Matches 117; Conservative 61; Mismatches 112; Indels 26; Gaps 9;

QY 1 MARRSRHRL-----L L L L L R Y L V V A L G Y H K A Y G F S A P K D Q Q V T A V Y Q E A I L A C - K 51
Db 3 LSRRLRLYLARLPDFLLLRGCM-----EAVNLKSSNRNPVH--EFESVELSCII 55

QY 52 TP K K T V X S R L E W K K L - G R S V S F V Y Y Q O T L Q G D F K N R A E M I - D F N I R I K N V T R S D A G K Y R C 109
Db 56 T D S Q T S D P R I E W K K I Q D G T Y Y V F D N K I Q G D L A G R T D V F G K T S L R I W N V T R S D A I Y R C 115

QY 110 E V S A P S E Q Q N L E E D T V T L E V L V A P V P S C E V P S S A L S G T V V E L R C O D K E G N P A P E Y T W F 169
Db 116 E V A L N D R - K E I D E I V I E L T V Q V K P T P V C R I P A A V P V G K T A T L Q C E S E G Y P R P H Y S W Y 174

QY 170 K D G I R L L E N P R L G S Q T N S S Y T W N T K T G T L Q F N T V S K L D T G E Y S C E A R N S V G Y R R C P G K R 229
Db 175 R N D V L P T D S R A N P R F Q N S S F H V N S E T G L V F N A V H K D S G Q Y Y C I A S N D A G A R C E G Q D 234

QY 230 M Q V D D L N I G S I I A A V V V A L V I S V C G L G V C Y A O R K G Y F - - S K E - - - - - T S F Q K S N S S X A 282
Db 235 M E Y V D L N I A G I I G G V L V L A V I A V T M G I C C A Y R R G C F I S S K Q D G S Y K S P G K H D G V N Y I 294

QY 283 T T M S E N D F K H T K S F I I 298
Db 295 R T S E G D F R H K I A F V I 310

RESULT 8
Q9BX67 PRELIMINARY; PRT; 310 AA.
AC Q9BX67;
DT 01-JUN-2001 (TrEMBLrel. 17, Created)
DT 01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
DT 01-MAR-2002 (TrEMBLrel. 23, Last annotation update)
DE Junctional adhesion molecule 3 precursor (Junctional adhesion molecule-2) (Junctional adhesion molecule-3) (Hypothetical protein FLJ90288) (Hypothetical protein FLJ90828).
DE JAM-2 OR JAM3.
GN Homo sapiens (Human).
OS Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC Tissue=Brain;
RA Cunningham S.A., Arrate M.P., Tran T.M.;
RL "Cloning of Human Junctional Adhesion Molecule 3.";
RT Submitted (MAR-2001) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RA Aurand-Lions M.A., Johnson-leger C., Wong C., Dupasquier L.;
RT "Heterogeneity of endothelial junctions is reflected by differential expression and specific subcellular localization of the three JAM family members.";
RT Junctional adhesion molecule 3.
RT Submitted (AUG-2001) to the EMBL/GenBank/DBJ databases.

[3]
RP SEQUENCE FROM N.A.
RA Aurand-Lions M.A., Johnson-leger C., Lamagna C., Ozaki H., Kita T.;
RT "Junctional adhesion molecules (JAMs) and interendothelial junctions.";
RL Submitted (AUG-2001) to the EMBL/GenBank/DBJ databases.
RN [4]
RP SEQUENCE FROM N.A.
RA Sachs U.J.H., Eva O., Berghoefer H., Santoso S.;
RT "Characterization of Junctional Adhesion Molecule-3 on Human Platelets: A New Member of Immunoglobulin Superfamily.";
RL Submitted (NOV-2001) to the EMBL/GenBank/DBJ databases.
RN [5]
RP SEQUENCE FROM N.A.
RA Tsogai T., Ota T., Nishikawa T., Hayaashi K., Otsuki T., Sugiyama T.,
RA Suzuki Y., Nagai K., Sugano S., Ishii S., Kawai-Hio Y., Saito K.,
RA Yamamoto J., Wakamatsu A., Nakamura Y., Kojima S., Nagahara K.,
RA Masuho Y., Ono T., Okano K., Yoshikawa Y., Aotsuka S., Sasaki N.,
RA Hattori A., Okumura K., Iwayanagi T., Ninomiya K.;
RT "NEDO human cDNA sequencing project.";
RL Submitted (MAR-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF356518; AAK27221.1; -.
DR EMBL; AJ344431; CAC69845.1; -.
DR EMBL; AF448478; AAM20925.1; -.
DR EMBL; AK074769; BAC11195.1; -.
DR EMBL; AK075309; BAC11538.1; -.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003006; Ig_MHC.
DR Pfam; PF00047; Ig; 2.
DR PROSITE; PS50835; IG_LIKE; 2.
KW Hypothetical protein; Signal.
FT SIGNAL 1 30
SQ SEQUENCE 310 AA; 35020 MW; CE39ADF33EALDAB9 CRC64;

Query Match 31.6%; Score 481; DB 4; Length 310;
Best Local Similarity 35.8%; Pred. No. 2.5e-36;
Matches 114; Conservative 60; Mismatches 116; Indels 28; Gaps 10;

QY 1 MARRSRHRL-----L L L L L R Y L V V A L G Y H K A Y G F S A P K D Q Q V T A V Y Q E A I L A C 50
Db 1 M A L R P P P L R L R C A R L P D F F L L L F R G C L I G -----A V N L K S S N R T P V Q - E F E S V E L S C 53

QY 51 - K T P K K T V X S R L E W K K L - G R S V S F V Y Y Q O T L Q G D F K N R A E M I - D F N I R I K N V T R S D A G K Y 107
Db 54 I I T D S Q T S D P R I E W K K I Q D E Q T Y Y F F D N K I Q G D L A G R A E I L G K T S L K I W N V T R R S A L Y 113

QY 108 R C E V S A P S E Q Q N L E E D T V T L E V L V A P V P S C E V P S S A L S G T V V E L R C O D K E G N P A P E Y T 167
Db 114 R C E V V A R N D R - K E I D E I V I E L T V Q V K P T P V C R V P K A V P V G K M A T L H C Q E S E G H P R P H Y S 172

QY 168 W F K D G I R L L E N P R L G S Q T N S S Y T W N T K T G T L Q F N T V S K L D T G E Y S C E A R N S V G Y R C P G 227
Db 173 W T R N D V L P T D S R A N P R F R N S S F H L N S E T G T L V F T A V H K D S G Q Y Y C I A S N D A G S A R C B E 232

QY 228 K M Q V D D L N I G S I I A A V V V A L V I S V C G L G V C Y A O R K G Y F - - S K E - - T S F Q - - - K S N S S 280
Db 233 Q E M E Y V D L N I G G I I G G V L V L A V I A L I T I G I C C A Y R R G Y F I N N K Q D G S Y K N P K P D G V N 292

QY 281 K A T T M S E N D F K H T K S F I I 298
Db 293 Y I R T D E G D F R H K S S F V I 310

RESULT 9
Q9BWL8 PRELIMINARY; PRT; 355 AA.
AC Q9BWL8;
DT 01-MAR-2002 (TrEMBLrel. 20, Created)
DT 01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE Junctional adhesion molecule 3.
GN JAM3.
OS Homo sapiens (Human).

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OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Hearn T.;
RN Submitted (OCT-2001) to the EMBL/GenBank/DBJ databases.
RL [2]
RP SEQUENCE FROM N.A.
RA Phillips H.M.;
RN "Narrowing the critical region within 11q24-qter for hypoplastic left
RT heart and identification of a candidate gene, JAM3, expressed during
RT cardiogenesis.";
RL Submitted (FEB-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AJ16101; CAC94776.1; -.
DR GenBank; HGNC:15532; JAM3.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003598; Ig C2.
DR InterPro; IPR003006; Ig_MHC.
DR Pfam; PF00047; Ig; 2.
DR SMART; SM00408; IgC2; 1.
DR PROSITE; PS00835; IG_LIKE; 2.
KW Immunoglobulin domain.
FT CHAIN 76 355 JUNCTION ADHESION MOLECULE 3.
SQ SEQUENCE 355 AA; 39602 MW; 8B1577DEA7B1D4F8 CRC64;

Query Match 31.6%; Score 481; DB 4; Length 355;
Best Local Similarity 35.8%; Pred. No. 3e-36;
Matches 114; Conservative 60; Mismatches 116; Indels 28; Gaps 10;

Qy 1 MARRSRRL-----LLLLRYLVVALGYHKAYGFSAPKQQVVTAVXYQEAAILAC 50
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
46 MALRRPRLRLCARLPDPFLLLLFRGCLG-----AVNLKSSNRTPVQ--EPFSEVLS 98
Qy 51 -KTPKKTXXSRLEWKXK-GRSVSVVYQOTLQSGDFKNRAEMI-DFNIRIKNVTNRSDAGKY 107
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
99 IITDSQTSDPRIEWKQIQDEQTTVVFNDKIQGLAGRAEILGKTSLKINWVTRDSALY 158
Qy 108 RCEVSAPSEQONLEEDTVTLVLVAVPVSCEVPSSALSGTVVLRCDKQEGNPAPET 167
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
159 RCEVVARNDR-KEIDEIVELTVQVKPVPVCRPKAVPVGKMATLRCQSEGHPRPHYS 217
Qy 168 WFKDGRILLENPRLGSGSTNSSTYMTKTGTLOPNTVSKLDTGYSCEARNVGYRRC 227
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
218 WYRNDVPLPTDSRANPRNSFHINSETGLVTAHVKDDSGQYCIASNDAGSARCEE 277
Qy 228 KRNQVDDNLISGIIAAVVVALVISVGLGVCAQRKGYF--SKE--TSFQ---KSNSSS 280
Db :|||: ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
278 QEMEVDNLNIGGIIGVVLVLAVALITLGICCAVRRGYFINNKQDGSYKPNPKPGVN 337
Qy 281 KATTMSNDPKHKTSTFI 298
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
338 YIRTEGDFRHKSSFVI 355

RESULT 10
Q96FL1 PRELIMINARY; PRT; 309 AA.
AC Q96FL1
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE Hypothetical protein (Fragment).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Tissue=Eye;
RN Submitted (JUL-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; BC010690; AAH10690.1; -.

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DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003598; Ig C2.
DR InterPro; IPR003006; Ig_MHC.
DR Pfam; PF00047; Ig; 2.
DR SMART; SM00408; IgC2; 1.
DR PROSITE; PS00835; IG_LIKE; 2.
KW Hypothetical protein; Immunoglobulin domain.
FT NON TER 1
SQ SEQUENCE 309 AA; 34917 MW; 50C5B1B7872E8DF3 CRC64;

Query Match 31.6%; Score 480; DB 4; Length 309;
Best Local Similarity 36.5%; Pred. No. 3.1e-36;
Matches 109; Conservative 60; Mismatches 112; Indels 18; Gaps 9;

Qy 10 LLLRLYLVVALGYHKAYGFSAPKQQVVTAVXYQEAAILAC-KTPKKTXXSRLEWKXK-L-G 67
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
19 LLLLRGCLIG-----AVNLKSSNRTPVQ--EPFSEVLSIIITDSQTSOPRIEWKQIQD 71
Qy 68 RSVSVVYQOTLQSGDFKNRAEMI-DFNIRIKNVTNRSDAGKYRCEVSAPSEQONLEEDTV 126
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
72 EQTTYVFPDNKIQGLAGRAEILGKTSLKINWVTRDSALYRCEVVARNDR-KEIDEIV 130
Qy 127 TLEVLVAVPVSCEVPSSALSGTVVLRCDKQEGNPAPETWPKDGIIRLLENPRLGSGST 186
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
131 ELTVRVPVTPVCRPKAVPVGKMATLRCQSEGHPRPHYSWYRNDVPLPTDSRANPRFR 190
Qy 187 NSSYMTNTKTGTLOPNTVSKLDTGYSCEARNVGYRRCQKRMQVDDNLISGIIAAVVV 246
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
191 NSSFHLSNSETGLVTAHVKDDSGQYCIASNDAGSARCEEQEMEVDNLNIGGIIGVVLV 250
Qy 247 VALVISVGLGVCAQRKGYF--SKE--TSFQ---KSNSSKATTMSNDPKHKTSTFI 298
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
251 VLAVLALITLGICCAVRRGYFINNKQDGSYKPNPKPGDGVNVRTDEGDFRHKSSFVI 309

RESULT 11
Q8VC39 PRELIMINARY; PRT; 300 AA.
AC Q8VC39
DT 01-MAR-2002 (TrEMBLrel. 20, Created)
DT 01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE Hypothetical protein (function cell adhesion molecule1).
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC Tissue=Breast tumor;
RA Strausberg R.;
RL Submitted (JAN-2002) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; Tissue=Cecum;
RX MEDLINE=22354683; PubMed=12466851;
RA The FANTOM Consortium,
RT "Analysis of the mouse transcriptome based on functional annotation of
RT 60,770 full-length cDNAs.";
RL Nature 420:563-573(2002).
DR EMBL; BC021876; AAH21876.1; -.
DR EMBL; AK033574; BAC28369.1; -.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003006; Ig_MHC.
DR InterPro; IPR003596; Ig_V.
DR Pfam; PF00047; Ig; 2.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS00835; IG_LIKE; 2.
KW Hypothetical protein.
SQ SEQUENCE 300 AA; 32423 MW; 3C561E8FF3B97EC CRC64;

Query Match 27.7%; Score 421; DB 11; Length 300;

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Best Local Similarity 34.6%; Pred. No. 8.9e-31;
Matches 104; Conservative 55; Mismatches 130; Indels 12; Gaps 6;

QY 4 RSRHLLLLLLLYLVALGYHAYGFSAPKQOQVAVXYQAILACKPKTKVXSRLEW 63
DB 6 KAGRKLFLFTSMILGSLVQVGSGVYTAQSDVQVPE---NESIKLTCTYSGFSFPRVEW 61
QY 64 KKL-GRSVSVFVYQOTLQDFKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEGOQNL 122
DB 62 KFGVQSTTALVCYNSQITAPADRVTFSSSGITFSSVTRKONGEYTCMV5--EEGGQNYG 119
QY 123 EDTVTVLEVLVAPVSCVPSSALSGTVVLRCDKGNPAPEYTFWFKDGIRLLNPRLG 182
DB 120 EVSIHLTVLVPSPKPTISVPSSVTIGNRAVLTCSEHDGSPPEY5FWFKDGISMLTADAKK 179
QY 183 SOS-TNSSYTWNTKTGTLOFTVSKLDTGEYSCARN5VG-YRRCPGKRMQVDDLNISGI 240
DB 180 TRAFNNSFTIDPKSGDILFDIPVTAQSDGEYVYQVQNGYGTAMRSEAAHMDAVELNVGGI 239
QY 241 IAAVVVVVALVISVCGLVGYAQRKGYF---SKETSFOKSNSSSKATTMTSENDFKHTK5FI 297
DB 240 VAAVLVTLILGLLIFGVWFAYSRGYFERTKGTAPGKKVIY5QPSRSEGEFKQTS5FL 299
QY 298 I 298
DB 300 V 300

RESULT 12
QYJHVI PRELIMINARY; PRT; 300 AA.
AC Q9JHY1;
DT 01-OCT-2000 (TrEMBLrel. 15, Created)
DT 01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE Junctional adhesion molecule JAM.
GN Rattus norvegicus (Rat).
OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Sprague Dawley;
RA Mashima H., Kojima I.;
RL Submitted (JUN-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL: AF276998; AAF78250.1; --
DR InterPro; IPR007110; IG-like.
DR InterPro; IPR003006; IG_MHC.
DR InterPro; IPR003596; IG_v.
DR SMART; SM00406; IGv; 2.
DR PROSITE; PS50835; IG LIKE; 2.
SQ SEQUENCE 300 AA; 32369 MW; 45AE362A96158BFA CRC64;

Query Match 26.9%; Score 409.5; DB 11; Length 300;
Best Local Similarity 34.3%; Pred. No. 1e-29;
Matches 95; Conservative 49; Mismatches 98; Indels 35; Gaps 6;

QY 28 GFSAKQDVVAVXYQAILACKPKTKVXSRLEWKKL-GRSVSVFVYQOTLQDFKNR 86
DB 53 GFSSP-----RVEMKRFVQGSTTALVCYNNQITVPYADR 85
QY 87 AEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEGOQNL5EDTVTVLEVLVAPVSCVPSSAL 146
DB 86 VTFSSSGITFSSVTRKONGEYTCMV5--EDGGQNYGVS5HLLTVLVPSPKPTV5IPS5VT 143
QY 147 SGTVVELRCDKGNPAPEYTFWFKDGIRLLNPRLG5QS-TNSSYTWNTKTGTLOFTVSK 205
DB 144 IGNRAVLTCSEHDGSPPEY5FWFKDGVPMLTADAKKTRAFINSS5YTTIDPKSGDLVFP5VS 203
QY 206 KLDTGEYSCARN5VG-YRRCPGKRMQVDDLNISGI5IAVVVALVTSVCGLVGYAQRK 264

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204 AFDSEYCEAQN5GYGTAMRSEAVRMEAVELNVGGI5VAVLVTLILGLLIFGIW5FAYSR 263
QY 265 GYF---SKETSFOKSNSSSKATTMTSENDFKHTK5FII 298
DB 264 GYFERTKGTAPGKKVIY5QPSAR5EGEFKQTS5FLV 300

RESULT 13
QY5B2 PRELIMINARY; PRT; 259 AA.
AC Q9Y5B2;
DT 01-NOV-1999 (TrEMBLrel. 12, Created)
DT 01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE Junction adhesion molecule.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Liu Y., Nusrat A., Schnell F.J., Walsh S., Reaves T.A., Pochet M.,
RT "Human junctional adhesion molecule is expressed by polarized columnar
RL epithelia and regulates tight junction resealing.";
RL Submitted (MAY-1999) to the EMBL/GenBank/DBJ databases.
DR EMBL: AF154005; AAD43794.1; --
DR InterPro; IPR007110; IG-like.
DR InterPro; IPR003598; IG_C2.
DR InterPro; IPR003006; IG_MHC.
DR Pfam; PF00047; Ig; 2.
DR SMART; SM00408; IGC2; 1.
DR PROSITE; PS50835; IG LIKE; 1.
KW Immunoglobulin domain.
SQ SEQUENCE 259 AA; 28122 MW; FE38521A911582D0 CRC64;

Query Match 25.9%; Score 393.5; DB 4; Length 259;
Best Local Similarity 36.9%; Pred. No. 2.6e-28;
Matches 87; Conservative 41; Mismatches 97; Indels 11; Gaps 4;

QY 69 SVSFVYQOTLQDFKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAP5EQGNLE5DTVTL 128
DB 29 SCAYSGFSSPRA5VEDRVTLPTGITFKSVTR5EDTGYTCMV5--E5GGNSYGEVKVL 86
QY 129 EVLVAPVSCVPSSALSGTVVLRCDKGNPAPEYTFWFKDGIRLLNPRLG5QSTNS 188
DB 87 IVLVPSPKPTVNI5PSSATIGNRAVLTCSEODGSPPEYTFWFKDGIVMTPNPK5TRAFNS 146
QY 189 SYTWNTKTGTLOFTVSKLDTGEYSCARN5SVGYRRC5PGK-RMQVDDLNISGI5IAVVV 247
DB 147 SYLVNPTTIGELVFDPL5ASDTGEYSCARN5GYTPMT5NAVRMEAVERNVGI5VAVLV 206
QY 248 ALVISVCGLVGYAQRKG5FK5KETSFOKSNSS5KA-----TTMTSENDFKHTK5FII 298
DB 207 LILGLILVGIW5FAYSRGH5DRT---KKGTSKKVIY5QPSAR5EGEFKQTS5FLV 259

RESULT 14
QYJKD5 PRELIMINARY; PRT; 173 AA.
AC Q9JKD5;
DT 01-OCT-2000 (TrEMBLrel. 15, Created)
DT 01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE Junctional adhesion molecule (Fragment).
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RA Kirsch T., Wellner M., Haller H., Lippoldt A.;
RT "Cloning of the rat junctional adhesion molecule (JAM).";

```

RL Submitted (MAR-2000) to the EMBL/GenBank/DBJ databases.

DR EMBL; AF241261; AAF61729.1; --
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003598; Ig_C2.
DR InterPro; IPR003006; Ig_MHC.
DR Pfam; PF00047; Ig; 1.
DR SMART; SM00408; IGC2; 1.
DR PROSITE; PS0835; IG_LIKE; 1.
KW Immunoglobulin domain.
FT NON TER 1
SQ SEQUENCE 173 AA; 18706 MW; 3EE3ECDFA5AFB8B2 CRC64;

Query Match 20.7%; Score 315.5; DB 11; Length 173;
Best Local Similarity 38.7%; Pred. No. 2.6e-21;
Matches 67; Conservative 36; Mismatches 65; Indels 5; Gaps 3;
QY 131 LVAPAVPCEVPSSALSGTWELRCQDEKGNPAPEYTFKDGIRLLENPLRGSQS-TNSS 189
DB 1 LVPPSKPTVISIPISSVTIGNRAVLITSEHGGSPSEYFNKDGVPMLTADAKTRAFINSS 60
QY 190 YTMNTKTGTLQNTVSKLDTGEYSCEARNVSG-YRRCPGKRMQVDDLNIIGIIAAVVVA 248
DB 61 YTIIDPKGDLVDFPVSADFGEYCEAQNQGYGTAMRSEAVRMEAVELNVGGIVAAVLVTL 120
QY 249 LVISVCGLGVCYAKRGYF---SKETSFOKSNSSSKATMTSENDEPKHTKSPFI 298
DB 121 ILLGLLIIFGWFAYSGRYGPFERTKGTAPGKVIYQSPARSSEGEFKPTSSFLV 173

RESULT 15

Q91664
ID Q91664 PRELIMINARY; PRT; 318 AA.
AC Q91664;
DT 01-NOV-1996 (TRENBLrel. 01, Created)
DT 01-NOV-1996 (TRENBLrel. 01, Last sequence update)
DT 01-MAR-2003 (TRENBLrel. 23, Last annotation update)
DE CTX.
OS Xenopus laevis (African clawed frog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidae; Pipidae;
OC Xenopodinae; Xenopus.
OX NCBI_TaxID=8355;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=ff; TISSUE=Thymus;
RX MEDLINE=96210130; PubMed=8625968;
RA Chretien I., Robert J., Marcuz A., Garcia-Sanz J.A., Courtet M.,
RA Du Pasquier L.;
RT "CTX, a novel molecule specifically expressed on the surface of
RT cortical thymocytes in Xenopus";
RL Eur. J. Immunol. 26:780-791(1996).
DR EMBL; U43330; AAC59899.1; --
DR InterPro; IPR003599; Ig.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003006; Ig_MHC.
DR Pfam; PF00047; Ig; 2.
DR SMART; SM00409; IG; 2.
DR PROSITE; PS0835; IG_LIKE; 2.
SQ SEQUENCE 318 AA; 34429 MW; 6231D24B0B806C09 CRC64;

Query Match 14.9%; Score 227; DB 13; Length 318;
Best Local Similarity 29.1%; Pred. No. 9.6e-13;
Matches 77; Conservative 39; Mismatches 107; Indels 42; Gaps 14;
QY 9 LLLLLLYLVVALGYHKYAFSAKQGVTVAVYQEAAILAC-----KTPKKTVXSRLW 63
DB 4 LLFITLGLSLTALSHCVQVTIQNP----IINVTSGQNTLVCTVILNNQKNLV--IQW 57
QY 64 -----KKLGRSVSFVYQ-QTLOG-DFKNR--AEMIDFN--IRIKNTRSDAGKYRCEV- 111
DB 58 NIFQAKSQNETVFFYQNGSLGSPYKKNRVTAAMSPGNATITISNMQSDTGIYTCVIL 117
QY 112 SAPSEQQNLEEDTDTVLEVLVAPAVPCEVPSSALSGTWELRCQDEKGNPAPEYTFWKD 171

DB 118 NLPSSGQG-----KILLTVLPSPVPHCSIRGAVETGHFISLLCYSEEGMPRIYSWNR- 172
QY 172 GIRLLENPLRGSQSTNSSYTMKTKTGLQNTVSKLDTGEYSCEARNVGYRRCP----- 226
DB 173 ----VENGLL--KSTPSQ--MNQOKGSLIIGNLTFEGYRCTASNILGNATCELNLHT 224
QY 227 -GKRMQVDDLNIISGIIAAVVVVVALV 250
DB 225 GGEVGVIAAAVIGGLLAAILIIV 249

Search completed: December 9, 2003, 17:13:00
Job time : 35.1882 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:26:03 ; Search time 44.6481 Seconds
(without alignments)
1059.408 Million cell updates/sec

Title: US-09-852-797-76

Perfect score: 298

Sequence: 1 MARRSRHRLLLRLVVA.....SSKATTMSNDPKHTKSFII 298

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 1107863 seqs, 158726573 residues

Word size : 30

Total number of hits satisfying chosen parameters: 40

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	296	99.3	298	19 AAW75220	Human secreted pro
2	296	99.3	298	23 AAE26983	Human gene 25 enco
3	296	99.3	298	23 AAE27121	Human gene 25 enco
4	296	99.3	298	24 ABR47926	Human secreted pro
5	296	99.3	298	24 ABU64994	Human secreted pro
6	296	99.3	298	24 ABR00172	Human gene 162 enc
7	240	80.5	298	19 AAW85457	Secreted protein e
8	240	80.5	298	22 AAU00512	Human functional a
9	240	80.5	298	23 ABP61801	Human polypeptide

10	240	80.5	298	24 AAO16452	Human functional a
11	230	77.2	312	20 AAY08060	Human PRO245 prote
12	230	77.2	312	20 AAY23324	A33 related antige
13	230	77.2	312	20 AAY13354	Amino acid sequenc
14	230	77.2	312	21 AAB33421	Human PRO245 prote
15	230	77.2	312	21 AAB24401	Human PRO245 prote
16	230	77.2	312	21 AAY70668	Human PRO245 prote
17	230	77.2	312	22 AAU12339	Human PRO245 polyp
18	230	77.2	312	22 AAU00821	Human immune respo
19	230	77.2	312	22 AAB80222	Human PRO245 prote
20	230	77.2	312	22 AAB50904	Human PRO245 prote
21	230	77.2	312	22 AAB53081	Human angiogenesis
22	230	77.2	312	24 ABU69632	Novel human secret
23	230	77.2	312	24 ABU71455	Human PRO polypept
24	230	77.2	312	24 ABU71901	Human secreted/tra
25	230	77.2	312	24 ABU07738	Human A-33 related
26	230	77.2	312	24 ABU66737	Human PRO polypept
27	230	77.2	312	24 ABU67013	Human secreted/tra
28	230	77.2	312	24 ABU67355	Human secreted pro
29	230	77.2	312	24 ABU59818	Novel secreted and
30	230	77.2	312	24 ABU64509	Human secreted/tra
31	230	77.2	312	24 ABU54357	Human secreted/tra
32	222	74.5	222	22 AAM41947	Human polypeptide
33	215	72.1	215	22 AAB70500	Angiogenesis prote
34	183	61.4	213	21 AAB27277	Human confluency r
35	166	55.7	303	22 AAM23693	Human EST encoded
36	107	35.9	107	22 AAM40161	Human polypeptide
37	89	29.9	388	22 ABG22341	Novel human diagno
38	73	24.5	140	22 ABG22338	Novel human diagno
39	69	23.2	69	22 ABG22339	Novel human diagno
40	51	17.1	66	22 ABG22340	Novel human diagno

ALIGNMENTS

RESULT 1
AAW75220
ID AAW75220 standard; Protein; 298 AA.
AC AAW75220;
XX
DT 29-JAN-1999 (first entry)
XX
DE Human secreted protein encoded by gene 25 clone HTSEB42.
XX
KW Human; secreted protein; fusion protein; gene therapy; protein therapy;
KW diagnosis; tissue; cancer; tumour; neurodegenerative disorder; leukaemia;
KW developmental abnormality; foetal deficiency; blood; allergy; renal;
KW immune system; asthma; lymphocytic disease; brain; hepatic; lymphoma;
KW inflammation; ischaemic shock; Alzheimer's disease; restenosis; AIDS;
KW cognitive disorder; schizophrenia; prostate; obesity; osteoclast; thymus;
KW osteoporosis; arthritis; testis; lung; thyroiditis; digestion;
KW endocrine; metabolism; regulation; malabsorption; gastritis; neoplasm.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Misc-difference 42 /label= unknown
FT Misc-difference 58 /label= unknown
FT Misc-difference 58 /label= unknown
XX
PN WO9840483-A2.
XX
PD 17-SEP-1998.
XX
PF 12-MAR-1998; 98WO-US04858.
XX
PR 19-DEC-1997; 97US-0068368.
PR 14-MAR-1997; 97US-0040710.
PR 14-MAR-1997; 97US-0040762.
PR 30-MAY-1997; 97US-0048100.

PR 30-MAY-1997; 97US-0048189.
 PR 30-MAY-1997; 97US-0048357.
 PR 30-MAY-1997; 97US-0050934.
 PR 06-JUN-1997; 97US-0048970.
 PR 05-SEP-1997; 97US-0057765.
 XX
 PA (HUMA-) HUMAN GENOME SCI INC.
 XX
 XX Ferrie AM, Fischer CL, Gentz RL, Greene JM, Kyaw H;
 PI Li H, Li Y, Moore PA, Rosen CA, Ruben SM, Soppet DR;
 PI Wei YF, Young PE, Zeng Z;
 XX
 DR WPI; 1998-520811/44.
 DR N-PSDB; AAV34310.
 XX
 XX Isolated human poly;nucleotide(s) encoding secretory peptide(s) -
 PT used to develop products for the diagnosis and treatment of e.g.
 PT inflammation, cancers, CNS disorders or immune system disorders
 XX
 XX Claim 1; Page 168-169; 201pp; English.
 XX
 CC This sequence represents a secreted human protein encoded by the gene
 CC clone detailed in the descriptor line. The gene can be used to generate
 CC fusion proteins by linking to the gene to a human immunoglobulin Fc
 CC portion (e.g. AAV34277) for increasing the stability of the fused
 CC protein as compared to the human protein only.
 CC The invention relates to 28 novel genes and their fragments (nucleic
 CC acid sequences: AAV34286-V34325; amino acid sequences AAW75196-W75235)
 CC which are useful for preventing, treating or ameliorating medical
 CC conditions e.g. by protein or gene therapy. Also, pathological
 CC conditions can be diagnosed by determining the amount of the new
 CC polypeptides in a sample or by determining the presence of mutations in
 CC the new polynucleotides. Specific uses are described for each of the 28
 CC polynucleotides, based on which tissues they are most highly expressed in
 CC (see AAV34286 for described uses).
 XX
 XX Sequence 298 AA;
 SQ
 Query Match 99.3%; Score 296; DB 19; Length 298;
 Best Local Similarity 100.0%; Pred. No. 2.5e-273;
 Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MARRSRRLRLRLRLRLRLVVALGHHKAYGFSAPKDDQVVTAVYQEAIALACKTPKTVKSR 60
 DB 1 MARRSRRLRLRLRLRLVVALGHHKAYGFSAPKDDQVVTAVYQEAIALACKTPKTVKSR 60
 QY 61 LEWKLGSRVSFVYQOTLQDGFKNRAEMIDFNIRIKNVTSDAGKYRCVSPAPSEQQQN 120
 DB 61 LEWKLGSRVSFVYQOTLQDGFKNRAEMIDFNIRIKNVTSDAGKYRCVSPAPSEQQQN 120
 QY 121 LEEDTTLVLVAPVAPVPSCEVPSSALSGTVVLRCDKGNPAPEYTWFKDGLRLLENPR 180
 DB 121 LEEDTTLVLVAPVAPVPSCEVPSSALSGTVVLRCDKGNPAPEYTWFKDGLRLLENPR 180
 QY 181 LGSQSTNSSTMTTKTGLTFNTVSKLDTGEYCEARNVGVYRCPCGRMQVDLNLISGI 240
 DB 181 LGSQSTNSSTMTTKTGLTFNTVSKLDTGEYCEARNVGVYRCPCGRMQVDLNLISGI 240
 QY 241 IAAVVVALVISVGLGVCAQRKGYSFVSKTSFQKSNSSSKATTMSNDPKTKSFII 298
 DB 241 IAAVVVALVISVGLGVCAQRKGYSFVSKTSFQKSNSSSKATTMSNDPKTKSFII 298
 RESULT 2
 ID AAE26983
 XX AAE26983 standard; Protein; 298 AA.
 XX
 AC AAE26983;
 XX
 DT 13-DEC-2002 (first entry)
 XX
 DE Human gene 25 encoded secreted protein HTEEB42, SEQ ID NO.76.
 XX

KW Human; immunodeficiency; X-linked agammaglobulinaemia; septic shock;
 KW autoimmune disorder; rheumatoid arthritis; multiple sclerosis; cancer;
 KW Grave's disease; diabetes mellitus; haematopoietic disorder; stroke;
 KW respiratory disorder; asthma; allergy; gastrointestinal disorder;
 KW inflammatory bowel disease; neurodegenerative disorder; hepatitis;
 KW Parkinson's disease; Alzheimer's disease; cardiovascular disorder;
 KW atherosclerosis; myocarditis; renal disorder; fungicide; virucide;
 KW hyperproliferative disorder; acute glomerulonephritis; tonsillitis;
 KW respiratory disorder; rhinitis; sinusitis; neurological disease;
 KW endocrine disorder; Addison's disease; reproductive system disorder;
 KW endometriosis; vasotropic; vulnary; cytostatic; nootropic; cardiant;
 KW anti-HIV; tranquilliser; gout; antiparasitic.
 XX
 OS Homo sapiens.
 XX
 XX Key Location/Qualifiers
 FH Peptide 1..22 /label= Signal_peptide
 FT Protein 23..298
 FT Misc-difference 42 /note= "Human mature secreted protein"
 FT /label= Unknown
 FT Misc-difference 58 /note= "Encoded by GWG"
 FT /label= Unknown
 FT /note= "Encoded by TSC"
 XX
 PN US2002077287-A1.
 XX
 XX 20-JUN-2002.
 XX
 XX 11-MAY-2001; 2001US-0852659.
 XX
 XX 11-SEP-1998; 98US-0152060.
 XX
 PA (RUBE/) RUBEN S M.
 PA (ROSE/) ROSEN C A.
 PA (LIYV/) LI Y.
 PA (ZENG/) ZENG Z.
 PA (KYAW/) KYAW H.
 PA (FISC/) FISCHER C L.
 PA (LIHH/) LI H.
 PA (SOPP/) SOPPET D R.
 PA (GENT/) GENTZ R L.
 PA (WEIY/) WEI Y.
 XX
 PI Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
 PI Soppet DR, Gentz RL, Wei Y, Moore PA, Young PE, Greene JM;
 PI Ferrie AM;
 XX
 DR WPI; 2002-598780/64.
 DR N-PSDB; AAD44660.
 XX
 XX Novel human secreted polypeptides and polynucleotides for diagnosing,
 PT preventing, treating immune, hyperproliferative, cardiovascular,
 PT neurological, reproductive disorders and identifying modulators of
 PT therapeutic use
 XX
 PS Claim 11; Page 186; 209pp; English.
 XX
 CC AAD44636-AAD44676 represent cDNAs corresponding to 28 human secreted
 CC protein genes, and AAE26959-AAE26999 represent the proteins they encode.
 CC AAE27000-AAE27025 represent human secreted protein fragments or their
 CC variants. The secreted proteins and genes are useful for preventing,
 CC treating or ameliorating medical conditions, e.g., by protein or gene
 CC therapy. Specific uses are described for each of the 28 genes, based
 CC on the tissues in which they are most highly expressed and include
 CC developing products for the diagnosis or treatment of immunodeficiencies,
 CC e.g., X-linked agammaglobulinaemia, B cell immunodeficiencies, severe
 CC combined immunodeficiencies, autoimmune disorders e.g., systemic lupus
 CC erythematosus, rheumatoid arthritis, multiple sclerosis, autoimmune
 CC thyroiditis, autoimmune haemolytic anaemia, Goodpasture's syndrome,
 CC Grave's disease, diabetes mellitus, dermatitis, inflammatory conditions

CC including septic shock, sepsis, reperfusion injury, inflammatory bowel
CC disease, Crohn's disease, hematopoietic disorders, respiratory
CC disorders e.g., asthma and allergy, gastrointestinal disorders e.g.,
CC inflammatory bowel disease), cancers e.g., gastric, ovarian, lung,
CC liver, bladder and breast), central nervous system (CNS) disorders e.g.,
CC ischemic brain injury and/or stroke, neurodegenerative disorders e.g.,
CC Parkinson's disease and Alzheimer's disease, AIDS-related dementia and
CC prion disease, cardiovascular disorders e.g., myocarditis, arrhythmias,
CC atherosclerosis, inflammatory disorders e.g., hepatitis, gout, trauma,
CC pancreatitis, sarcoidosis and allogeneic transplant rejection, blood-
CC related disorder (thrombosis, arterial thrombosis, atherosclerosis),
CC hyperproliferative disorders, respiratory disorders e.g. rhinitis,
CC sinusitis, tonsillitis, lung cancer, allergic disorders, pneumonitis,
CC renal disorders, e.g. acute glomerulonephritis, neurological diseases,
CC liver disorders, endocrine disorders e.g., hyperthyroidism, Addison's
CC disease, hyperpituitarism, infectious diseases and reproductive system
CC disorders e.g. endometriosis. The present sequence represents a human
CC secreted protein of the invention.

XX
SQ Sequence 298 AA;

Query Match 99.3%; Score 296; DB 23; Length 298;
Best Local Similarity 100.0%; Pred. No. 2.5e-273;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARRSRRLRLRLRLRLRLVVALGYHKGAFSAPKQQQVTVAVYQEAAILACKTPKTVKSR 60
DB 1 MARRSRRLRLRLRLRLVVALGYHKGAFSAPKQQQVTVAVYQEAAILACKTPKTVKSR 60

QY 61 LEWKKLGRSVFVYQOITLQGDGPKNAEMIDFNIRIKNVTSDAGKYRCEVSAPSQQN 120
DB 61 LEWKKLGRSVFVYQOITLQGDGPKNAEMIDFNIRIKNVTSDAGKYRCEVSAPSQQN 120

QY 121 LEEDVTLEVLVAPVPSCEVSSALSGTVVLRCDKEGNPAPEYTFWKGIRLLENPR 180
DB 121 LEEDVTLEVLVAPVPSCEVSSALSGTVVLRCDKEGNPAPEYTFWKGIRLLENPR 180

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DB 181 LGSQSTNSSTYTNMTKTGTLQFNVTSKLDGTGEYSCEARNVGVYRRCFGKMQVDDNLISGI 240

QY 241 IAAVVVALVISVGLGVCYAKRGVFSKETSFKQSNSSSKATTMSNDPKHTKSFII 298
DB 241 IAAVVVALVISVGLGVCYAKRGVFSKETSFKQSNSSSKATTMSNDPKHTKSFII 298

RESULT 3
AAE27121
ID AAE27121 standard; Protein; 298 AA.
AC AAE27121;
DT 13-DEC-2002 (first entry)
DE Human gene 25 encoded secreted protein HTEB42, SEQ ID NO:76.
XX Human; secreted protein; autoimmune disease; hyperproliferative disorder;
KW rheumatoid arthritis; neoplasm; cerebrovascular disorder; angiogenesis;
KW cerebral ischemia; cardiovascular disorder; nervous system disorder;
KW cardiac arrest; Alzheimer's disease; ocular disorder; wound healing;
KW infection; corneal infection; skin aging; food additive; preservative;
KW tissue regeneration; immunosuppressive; antiproliferative; cytostatic;
KW cardiant; vasotropic; cerebroprotective; neurotropic; neuroprotective;
KW antibacterial; virucide; fungicide; ophthalmological; gene therapy;
KW vulnery.

OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Peptide 1..22
FT /label= Signal_peptide
FT 23..298
FT /note= "Mature human secreted protein"

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FT /note= "Encoded by GWG"
FT Misc-difference 58 /label= Unknown
FT /note= "Encoded by TSC"
XX US2002076756-A1.
XX 20-JUN-2002.
XX 11-MAY-2001; 2001US-0853161.
XX 02-FEB-2001; 2001US-265583P.
XX (RUBE/) RUBEN S M.
XX (ROSE/) ROSEN C A.
XX (LIYY/) LI Y.
XX (ZENG/) ZENG Z.
XX (KYAW/) KYAW H.
XX (FISC/) FISCHER C L.
XX (LIHH/) LI H.
XX (SOPP/) SOPPET D R.
XX (GENT/) GENTZ R L.
XX (WEIY/) WEI Y.
XX (MOOR/) MOORE P A.
XX (YOUN/) YOUNG P E.
XX (GREE/) GREENE J M.
XX (FERR/) FERRIE A M.
XX Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
XX Soppet DR, Gentz RL, Wei Y, Moore PA, Young PE, Greene JM;
XX Ferrie AM;
XX WPI; 2002-574454/61.
XX N-PSDB; AAD44878.
XX New nucleic acid molecules encoding 28 human secreted proteins, useful
XX for diagnosing, preventing, treating or ameliorating medical conditions
XX and as food additives or preservatives
XX Claim 11; Page 186-187; 209pp; English.
XX AAD4485A-AAD44984 represent cDNAs corresponding to 28 human secreted
XX protein genes, and AAE27097-AAE27137 represent the proteins they encode.
XX AAE27138-AAE27164 represent human secreted protein fragments. The genes
XX and their corresponding secreted proteins are useful for preventing,
XX treating or ameliorating medical conditions, e.g., by protein or gene
XX therapy. Secreted protein sequences of the invention are useful for the
XX diagnosis or treatment of disorders such as autoimmune diseases (e.g.,
XX rheumatoid arthritis), hyperproliferative disorders (e.g. neoplasms of
XX the breast or liver), cerebrovascular disorders (e.g. cerebral ischemia,
XX angiogenesis), cardiovascular disorders (e.g. cardiac arrest), nervous
XX system disorders (e.g. Alzheimer's disease), infections caused by fungi,
XX bacteria and viruses and ocular disorders (e.g. corneal infection). The
XX polypeptides can also be used to aid wound healing and epithelial cell
XX proliferation, to prevent skin aging due to sunburn, to maintain organs
XX before transplantation, for supporting cell culture of primary tissues,
XX to regenerate tissues and in chemotaxis. They can also be used as food
XX additives or preservative to increase or decrease storage capabilities,
XX fat content, lipid, protein, carbohydrate, vitamins, minerals, cofactors
XX and other nutritional components. The present sequence represents a human
XX secreted protein of the invention.

XX
SQ Sequence 298 AA;

Query Match 99.3%; Score 296; DB 23; Length 298;
Best Local Similarity 100.0%; Pred. No. 2.5e-273;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARRSRRLRLRLRLRLVVALGYHKGAFSAPKQQQVTVAVYQEAAILACKTPKTVKSR 60
DB 1 MARRSRRLRLRLRLRLVVALGYHKGAFSAPKQQQVTVAVYQEAAILACKTPKTVKSR 60

QY 61 LEWKLGSRVSFVYVYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQN 120
 DB 61 LEWKLGSRVSFVYVYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQN 120
 QY 121 LEEDVTLEVLVAPVPSCEVPSSALSGTVVLRQDKEGNPAPEYTWFKDGIRLLENPR 180
 DB 121 LEEDVTLEVLVAPVPSCEVPSSALSGTVVLRQDKEGNPAPEYTWFKDGIRLLENPR 180
 QY 181 LGSQSTNSSTYMTNTKTGTLQNTVSKLDTGEYSCEARNVSVYRCPGKRMQVDDNLISGI 240
 DB 181 LGSQSTNSSTYMTNTKTGTLQNTVSKLDTGEYSCEARNVSVYRCPGKRMQVDDNLISGI 240
 QY 241 IAAVVVVVALVISVCGLVGYAQRKGYSKETSFKQSNSSSKATTMSENDFKHTKSFI 298
 DB 241 IAAVVVVVALVISVCGLVGYAQRKGYSKETSFKQSNSSSKATTMSENDFKHTKSFI 298

RESULT 4

ABR47926
 ID ABR47926 standard; Protein; 298 AA.

AC ABR47926;

XX 12-JUN-2003 (first entry)

XX Human secreted protein, SEQ ID 817.

XX Cardiant; antiarrhythmic; antiarteriosclerotic; vasotropic; cytostatic;
 KW vulnerable; antiinflammatory; neurotropic; neuroprotective;
 KW antiparkinsonian; gene therapy; human; cardiovascular disorder.

XX Homo sapiens.

XX WO200295010-A2.

XX 28-NOV-2002.

XX 19-MAR-2002; 2002WO-US09785.

XX 21-MAR-2001; 2001US-277340P.

PR 19-JUL-2001; 2001US-306171P.

PR 13-NOV-2001; 2001US-331287P.

XX (HUMA-) HUMAN GENOME SCI INC.

XX Rosen CA, Ruben SM;

XX WPI; 2003-129429/12.

XX Novel human secreted proteins, useful for detecting, preventing,

XX diagnosing, prognosticating, treating and/or ameliorating

XX cardiovascular disorders such as arrhythmia -

XX Claim 13; SEQ ID 817; 1881pp; English.

XX The present invention relates to novel human secreted proteins
 CC (ABR47633-ABR48145) and their coding sequences (ACC50344-ACC50856). The
 CC proteins and their coding sequences are useful for the preparation of a
 CC diagnostic or pharmaceutical composition for diagnosing or treating a
 CC cardiovascular disorder (e.g., arrhythmia, tachycardia, cardiac arrest,
 CC coronary arteriosclerosis and myocardial ischemia), neural disorders,
 CC immune system disorders, muscular disorders, reproductive disorders,
 CC gastrointestinal disorders, pulmonary disorders, renal disorders,
 CC proliferative disorders and/or cancerous diseases and conditions, for
 CC wound healing and epithelial cell proliferation, to treat inflammation or
 CC infection, for treating thrombosis and arteriosclerosis, for treating or
 CC preventing neural damage which occurs in neuronal disorders or
 CC neurodegenerative conditions such as Alzheimer's disease and Parkinson's
 CC disease, to enhance bone and periodontal regeneration and aid in tissue
 CC transplants or bone grafts, to prevent skin aging or hair loss, to
 CC stimulate growth and differentiation of haematopoietic cells and bone
 CC marrow cells when used in combination with other cytokines, to maintain

CC organs before transplantation or for supporting cell culture of primary
 CC tissue, to increase or decrease differentiation or proliferation of
 CC embryonic stem cells, or to modulate mammalian characteristics or
 CC metabolism.

CC Note: The sequence data for this patent was published in electronic
 CC format and is available from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences.

XX Sequence 298 AA;

QY Query Match 99.3%; Score 296; DB 24; Length 298;
 DB Best Local Similarity 100.0%; Pred. NO. 2.5e-273;
 XX Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARRSRRLRLRLRLRLRYLVVALGYHKAQFSAKDDQVVTAVXQEAILACKTPKKTYSR 60

DB 1 MARRSRRLRLRLRLRLRYLVVALGYHKAQFSAKDDQVVTAVXQEAILACKTPKKTYSR 60

QY 61 LEWKLGSRVSFVYVYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQN 120

DB 61 LEWKLGSRVSFVYVYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQN 120

QY 121 LEEDVTLEVLVAPVPSCEVPSSALSGTVVLRQDKEGNPAPEYTWFKDGIRLLENPR 180

DB 121 LEEDVTLEVLVAPVPSCEVPSSALSGTVVLRQDKEGNPAPEYTWFKDGIRLLENPR 180

QY 181 LGSQSTNSSTYMTNTKTGTLQNTVSKLDTGEYSCEARNVSVYRCPGKRMQVDDNLISGI 240

DB 181 LGSQSTNSSTYMTNTKTGTLQNTVSKLDTGEYSCEARNVSVYRCPGKRMQVDDNLISGI 240

QY 241 IAAVVVVVALVISVCGLVGYAQRKGYSKETSFKQSNSSSKATTMSENDFKHTKSFI 298

DB 241 IAAVVVVVALVISVCGLVGYAQRKGYSKETSFKQSNSSSKATTMSENDFKHTKSFI 298

RESULT 5

ABU64994

ID ABU64994 standard; Protein; 298 AA.

AC ABU64994;

XX 15-MAY-2003 (first entry)

XX Human secreted protein gene 25, protein.

XX Secreted protein; immunodeficiency; multiple sclerosis;
 KW severe combined immunodeficiency; autoimmune disorder; cancer;
 KW rheumatoid arthritis; diabetes mellitus; haematopoietic disorder;
 KW inflammatory condition; septic shock; inflammatory bowel disease;
 KW Crohn's disease; respiratory disorder; asthma; allergy; stroke;
 KW gastrointestinal disorder; central nervous system disorder;
 KW ischaemic brain injury; neurodegenerative disorder; Parkinson's disease;
 KW Alzheimer's disease; cardiovascular disorder; atherosclerosis;
 KW blood-related disorder; thrombosis; acute glomerulonephritis; renal disorder;
 KW hyperproliferative disorder; liver disease; reproductive system disorder;
 KW endometriosis; infectious disease; pancreatic disorder; vaccine;
 KW wound repair; angiogenesis; lymphatic disorder; hair loss; body weight;
 KW body height; hair colour; human.

XX Homo sapiens.

XX US2002172994-A1.

XX 21-NOV-2002.

XX 11-MAY-2001; 2001US-0852797.

XX 14-MAR-1997; 97US-040710P.

PR 14-MAR-1997; 97US-040762P.

PR 30-MAY-1997; 97US-048100P.

PR 30-MAY-1997; 97US-048189P.

PR 30-MAY-1997; 97US-048357P.

PR 30-MAY-1997; 97US-050934P.
PR 06-JUN-1997; 97US-048970P.
PR 05-SEP-1997; 97US-057765P.
PR 13-DEC-1997; 97US-068368P.
PR 02-FEB-2001; 2001US-265583P.
PR 12-MAR-1998; 98US-050485P.
PR 11-SEP-1998; 98US-0152060.
XX (RUBE/) RUBEN S M.
PA (ROSE/) ROSEN C A.
PA (LIYY/) LI Y.
PA (ZENG/) ZENG Z.
PA (KYAW/) KYAW H.
PA (FISC/) FISCHER C L.
PA (LIHH/) LI H.
PA (SOPP/) SOPP D R.
PA (GENT/) GENTZ R L.
PA (WEIR/) WEI Y.
PA (MOOR/) MOORE P A.
PA (YOUN/) YOUNG P E.
PA (GREE/) GREENE J M.
PA (FERR/) FERRIE A M.
XX Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
PI Soppet DR, Gentz RL, Wei Y, Moore PA, Young PE, Greene JM;
PI Ferrie AM;
XX WPI: 2003-310989/30.
DR N-PSDB; ABX96990.
XX
PT New human secreted polypeptides and polynucleotides for diagnosing,
PT prognosing, preventing and treating immune, hyperproliferative, liver,
PT kidney, reproductive disorders and for identifying modulators of
PT therapeutic use -
XX
PS Claim 11; Page 186; 209pp; English.
XX
CC The invention relates to an isolated polypeptide comprising an amino acid
CC sequence at least 95% identical to sequence of 28 human secreted
CC proteins, their fragment, polypeptide domain, epitope, secreted form,
CC variant, allelic variant, or species homologue, or the encoded sequence
CC included in ATCC 97921 and 97922. Also included are the encoding
CC nucleic acids, recombinant vectors, host cells, antibodies, and genes.
CC The proteins and nucleic acids are useful for diagnosing, preventing,
CC treating, prognosing or ameliorating a medical condition e.g.
CC immunodeficiencies (e.g. X-linked agammaglobulinaemia, B cell
CC disorders (e.g. systemic erythematosis, rheumatoid arthritis, multiple
CC sclerosis, autoimmune thyroiditis, autoimmune haemolytic anaemia,
CC Goodpasture's syndrome, Grave's disease, diabetes mellitus, dermatitis),
CC haematopoietic disorders, inflammatory conditions (e.g. septic shock,
CC sepsis, reperfusion injury, inflammatory bowel disease, Crohn's disease),
CC respiratory disorders (e.g. asthma and allergy), gastrointestinal
CC disorders, cancers (e.g. gastric, ovarian, lung, bladder, liver and
CC breast), central nervous system (CNS) disorders (e.g. ischaemic brain
CC injury and/or stroke, traumatic brain injury), neurodegenerative
CC disorders (e.g. Parkinson's disease and Alzheimer's disease, AIDS-related
CC dementia, and prion disease), cardiovascular disorders (e.g.
CC atherosclerosis, myocarditis, cardiovascular disease, and cardiopulmonary
CC bypass complications), inflammation (e.g. hepatitis, gout, trauma,
CC pancreatitis, sarcoidosis, dermatitis, allogenic transplant rejection),
CC blood-related disorders (thrombosis, arterial thrombosis),
CC hyperproliferative disorders, renal disorders (e.g. acute
CC glomerulonephritis), endocrine disorders (e.g. Addison's disease,
CC hyperthyroidism, hypoparathyroidism), liver diseases and disorders,
CC reproductive system disorders (e.g. endometriosis), infectious diseases,
CC and pancreatic disorders. Many other diseases and disorders are listed in
CC the specification. They also useful as a vaccine adjuvant. Further they
CC are useful to enhance or inhibit complement mediated cell lysis, for
CC stimulating wound and tissue repair, angiogenesis, and the repair of
CC vascular or lymphatic diseases or disorders. They are also useful
CC to prevent hair loss, to modulate mammalian characteristics such as body
CC height, weight, hair colour, and to increase or decrease storage

CC capabilities, fat content, lipid, protein, carbohydrate, vitamins,
CC minerals, cofactors or other nutritional components. The proteins are
CC also useful for identifying binding partners. The present sequence
CC represents a secreted protein of the invention.
XX
SQ Sequence 298 AA;
Query Match 99.1%; Score 296; DB 24; Length 298;
Best Local Similarity 100.0%; Pred. No. 2.5e-273;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MARRSRHRLLLRLVWALGYHKAYGFSAPKDDQVVTAVYQEAIALACKTPKKTVXSR 60
DB 1 MARRSRHRLLLRLVWALGYHKAYGFSAPKDDQVVTAVYQEAIALACKTPKKTVXSR 60
QY 61 LEWKLGSRVSFVYYQOTLQDGFNRAEMIDFNIRIKNVTRSDAGKYRCVSPSEGCQN 120
DB 61 LEWKLGSRVSFVYYQOTLQDGFNRAEMIDFNIRIKNVTRSDAGKYRCVSPSEGCQN 120
QY 121 LEEDTVTLVLVAPVAPVPSCEVPSSALSGTVVLRCDKEGNPAPEYTFWFKDGLRLLENPR 180
DB 121 LEEDTVTLVLVAPVAPVPSCEVPSSALSGTVVLRCDKEGNPAPEYTFWFKDGLRLLENPR 180
QY 181 LGSQSTNSSYTMNTKTGTQFNTVSKLDTGEYSCARNVGYRRCPCGRMQVDDLNISGI 240
DB 181 LGSQSTNSSYTMNTKTGTQFNTVSKLDTGEYSCARNVGYRRCPCGRMQVDDLNISGI 240
QY 241 IAAVVVVVALVISVGLGVCYVAQRKYFSKETSFKQSNSSSKATTMSNDPFKHTKSFII 298
DB 241 IAAVVVVVALVISVGLGVCYVAQRKYFSKETSFKQSNSSSKATTMSNDPFKHTKSFII 298
RESULT 6
ABR00172
ID ABR00172 standard; Protein; 298 AA.
XX
AC ABR00172;
XX
DT 03-APR-2003 (first entry)
XX
DE Human gene 162 encoded secreted protein HTEB42, SEQ ID NO:461.
XX
KW Human; secreted protein; digestive disorder; gastrointestinal disorder;
KW mouth; oesophagus; stomach; small intestine; large intestine; liver;
KW biliary tract; pancreas; cancer; tumour; hyperproliferative disorder;
KW immune disorder; inflammation; infection; wound healing; drug screening;
KW chromosome identification; chromosome mapping; cytostatic; gene therapy;
KW antiinflammatory; immunosuppressive; vulnery; chromosome 21q21.2.
XX
OS Homo sapiens.
XX
PN WO200276488-A1.
XX
PD 03-OCT-2002.
XX
PP 19-MAR-2002; 2002WO-US08276.
XX
PR 21-MAR-2001; 2001US-277340P.
PR 19-JUL-2001; 2001US-306171P.
PR 13-NOV-2001; 2001US-331287P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM;
XX
DR WPI: 2003-029900/02.
DR N-PSDB; ABZ71351.
XX
PT New human secreted proteins and nucleic acids, useful for detecting,
PT preventing, diagnosing, prognosticating, treating and/or ameliorating
PT e.g. gastrointestinal diseases and disorders, or cancers -
XX
PS Claim 13; Page 1046-1047; 1216pp; English.

XX AB2711190-AB271478 represent cDNAs corresponding to 178 human secreted
CC protein genes, and ABP00011-ABP00299 represent the proteins they encode.
CC AB271479-AB271540 represent human secreted protein genomic fragments. The
CC invention also encompasses antibodies specific for the secreted proteins,
CC the use of the secreted proteins in drug screening, and recombinant
CC vectors and host cells comprising a nucleic acid of the invention. The
CC secreted proteins, nucleic acids encoding them, antibodies or antibody
CC fragments specific for the secreted proteins, and modulators of protein
CC activity are useful for diagnosing, treating, ameliorating or preventing
CC digestive disorders. Such conditions include disorders of the mouth,
CC oesophagus, stomach, small intestine, large intestine, liver, biliary
CC tract and pancreas, and include cancers of these organs and tissues. The
CC secreted proteins and their nucleic acids may also be used in the
CC treatment of immune disorders, inflammation, infection,
CC hyperproliferative disorders, and to promote wound healing. Nucleic acids
CC of the invention may be used for chromosome identification, chromosome
CC mapping, in gene therapy, for identifying individuals from minute
CC biological samples, as hybridisation probes, and as molecular weight
CC markers. The present sequence represents a human secreted protein of the
CC invention.

XX SQ Sequence 298 AA;
Query Match 99.3%; Score 296; DB 24; Length 298;
Best Local Similarity 100.0%; Pred. No. 2.5e-273;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MARRSRHLLLLRLYLVALGYHKAFCFAPKQOQVVTVXQYQAILACKTPKKTYSR 60
DB 1 MARRSRHLLLLRLYLVALGYHKAFCFAPKQOQVVTVXQYQAILACKTPKKTYSR 60
QY 61 LEWKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQN 120
DB 61 LEWKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQN 120
QY 121 LEEDTVTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGPAPEYTFWFKDGIIRLENPR 180
DB 121 LEEDTVTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGPAPEYTFWFKDGIIRLENPR 180
QY 181 LGSQSTNSSTYNTMTGTGLQFNTVSKLDTGYSCEARNVGYRCPGKRMQVDDLNI 240
DB 181 LGSQSTNSSTYNTMTGTGLQFNTVSKLDTGYSCEARNVGYRCPGKRMQVDDLNI 240
QY 241 IAAVVVVALVISVCGLVGYAQRKGYSFKTSFQKSNSSSKATTMSENDFKHTKSFII 298
DB 241 IAAVVVVALVISVCGLVGYAQRKGYSFKTSFQKSNSSSKATTMSENDFKHTKSFII 298

RESULT 7
AAW85457
XX ID AAW85457 standard; Protein; 298 AA.
XX AC AAW85457;
XX XX
XX XX
XX 25-FEB-1999 (first entry)
XX XX
XX Secreted protein encoded by clone ct864_4.
XX XX
XX Secreted protein; nutritional activity; immune stimulating; vaccine;
XX suppressing activity; haematopoiesis regulating activity;
XX tissue growth activity; activin; inhibin activity; chemotactaxis;
XX chemokinetic activity; haemostasis; thrombolytic activity; receptor;
XX ligand; anti-inflammatory; cadherin; tumour invasion suppressor;
XX tumour inhibition; gene therapy.
XX XX
XX Homo sapiens.
XX OS
XX XX
XX PN W09842739-A2.
XX XX
XX PD 01-OCT-1998.
XX XX
XX 20-MAR-1998; 98WO-US05653.

XX 19-MAR-1998; 98US-0044466.
PR 21-MAR-1997; 97US-0822167.
XX (GEMY) GENETICS INST INC.
XX PA
XX Agostino MJ, Jacobs K, Lavallie ER, McCoy JM, Merberg D;
PI Racie LA, Spaulding V, Treacy M;
XX
XX WPI; 1998-609890/51.
DR N-PSDB; AAW82780.
XX
XX New polynucleotides encoding secreted human proteins - derived from
PT human foetal brain, adult brain, foetal kidney, placenta or adult
PT pineal gland cDNA libraries.
XX
XX Claim 17; Page 73-74; 113pp; English.

XX The present sequence represents a secreted protein. The polynucleotide
XX and secreted protein are predicted to have biological activities which
XX would make them suitable for treating, preventing or ameliorating medical
XX conditions in humans and animals, although no supporting data is given.
XX Suggested activities include nutritional activity, immune stimulating
XX (e.g. as vaccines) or suppressing activity, haematopoiesis regulating
XX activity, tissue growth activity, activin/inhibin activity,
XX chemotactic/chemokinetic activity, haemostatic and thrombolytic activity,
XX receptor/ligand activity, anti-inflammatory activity, cadherin/tumour
XX invasion suppressor activity, and tumour inhibition activity (no data is
XX given in the specification to support these activities). The
XX polynucleotide is also stated to be useful for gene therapy.

XX SQ Sequence 298 AA;
Query Match 80.5%; Score 240; DB 19; Length 298;
Best Local Similarity 100.0%; Pred. No. 5.2e-220;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 59 SRLBWKLLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118
DB 59 SRLBWKLLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118
QY 119 QNLBEDTVTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGPAPEYTFWFKDGIIRLEN 178
DB 119 QNLBEDTVTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGPAPEYTFWFKDGIIRLEN 178
QY 179 PRGQSQSTNSSTYNTMTGTGLQFNTVSKLDTGYSCEARNVGYRCPGKRMQVDDLNI 238
DB 179 PRGQSQSTNSSTYNTMTGTGLQFNTVSKLDTGYSCEARNVGYRCPGKRMQVDDLNI 238
QY 239 GIITAAVVVVALVISVCGLVGYAQRKGYSFKTSFQKSNSSSKATTMSENDFKHTKSFII 298
DB 239 GIITAAVVVVALVISVCGLVGYAQRKGYSFKTSFQKSNSSSKATTMSENDFKHTKSFII 298

RESULT 8
AAU00512
XX ID AAU00512 standard; Protein; 298 AA.
XX AC AAU00512;
XX XX
XX 09-MAY-2001 (first entry)
XX DT
XX Human junctional adhesion protein (JAM2).
XX DE
XX Junctional adhesion protein; JAM2; cellular localisation;
XX cellular expression; immunoprecipitation; stroke; phosphorylation;
XX glycosylation; paracellular migration; inflammatory disease;
XX arthritis; asthma; rheumatoid arthritis; inflammatory bowel disease;
XX Crohn's disease.
XX XX
XX OS Homo sapiens.
XX XX
XX FH Key Location/Qualifiers

FT Peptide 1..20 /note= "Possible signal peptide #1"
 FT Peptide 1..28 /note= "Possible signal peptide #2"
 FT Protein 21..298 /note= "Possible mature JAM2 #1"
 FT Protein 29..298 /note= "Possible mature JAM2 #2"
 FT Domain 237..254 /note= "Transmembrane domain"
 XX W0200114404-A1.
 XX 01-MAR-2001.
 XX 23-AUG-2000; 2000MO-US23158.
 XX 24-AUG-1999; 99US-0150459.
 XX (TEXA-) TEXAS BIOTECHNOLOGY CORP.
 XX Cunningham S, Trinidad Arrate Barros M;
 XX WPI; 2001-218425/22.
 XX N-PSDB; AAS00512.
 XX Novel nucleic acids encoding human junctional adhesion protein useful
 XX for producing antibodies that are suitable for therapeutic purposes -
 XX Claim 4; Page 46-47; 51pp; English.
 XX The sequence represents a human junctional adhesion molecule 2 (JAM2).
 XX The polynucleotide encoding the polypeptide is useful for recombinant
 XX production of JAM-2 protein, which in turn is useful for the production
 XX of antibodies. The antibodies may be used for probing cellular
 XX localisation and/or expression of JAM2 in tissues under normal and
 XX disease states, for immunoprecipitating JAM2 protein from cells and/or
 XX stroke tissues to determine whether it is modified by glycosylation and
 XX phosphorylation, and for determining JAM2 function. The antibodies
 XX inhibit interaction of JAM2 with inflammatory cells or influences their
 XX paracellular migration, and is therefore useful for alleviating
 XX inflammatory diseases such as arthritis, asthma, rheumatoid arthritis,
 XX inflammatory bowel disease and Crohn's disease.
 XX SQ Sequence 298 AA;
 Query Match 80.5%; Score 240; DB 22; Length 298;
 Best Local Similarity 100.0%; Pred. No. 5.2e-220;
 Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 59 SRLEWKKLGRSVFVYQQTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOG 118
 DB 59 SRLEWKKLGRSVFVYQQTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOG 118
 QY 119 QNLEEDTVLEVLVAPAPVSCVPSVSSALSGTVVELRCQDKGPNAPPEYTFWKGIRLLEN 178
 DB 119 QNLEEDTVLEVLVAPAPVSCVPSVSSALSGTVVELRCQDKGPNAPPEYTFWKGIRLLEN 178
 QY 179 PRLGQSSTNSSTYMTKTGTLQNTVSKLDTGEYSCAENSQYRCRCRQWQVDDLNTS 238
 DB 179 PRLGQSSTNSSTYMTKTGTLQNTVSKLDTGEYSCAENSQYRCRCRQWQVDDLNTS 238
 QY 239 GIIAAVVVALVISVCGLGVCVQAQRKGYSKETSFKQKNSSSKATMTSENDFKHTKSFII 298
 DB 239 GIIAAVVVALVISVCGLGVCVQAQRKGYSKETSFKQKNSSSKATMTSENDFKHTKSFII 298
 RESULT 9
 ID ABP61801
 XX ABP61801 standard; Protein; 298 AA.
 AC ABP61801;
 XX

DT 04-OCT-2002 (first entry)
 XX Human polypeptide SEQ ID NO 155.
 XX Human; cytostatic; antirheumatic; antiarthritic; vulnerary; analgesic;
 XX antiinflammatory; antibacterial; immunosuppressive; antiparkinsonian;
 XX neuroprotective; nootropic; osteopathic; haemostatic; vasotropic;
 XX antiulcer; fungicide; antidiabetic; antiasthmatic; antiallergic;
 XX immunostimulant; antiparasitic; secreted protein; transmembrane protein;
 XX cytokine; cell proliferation; cell differentiation; autoimmune disease;
 XX stem cell; growth factor; nervous system disease; neuropathy;
 XX Alzheimer's disease; Parkinson's disease; Huntington's disease;
 XX osteoporosis; severe combined immunodeficiency; SCID; infection;
 XX multiple sclerosis; rheumatoid arthritis; gene therapy.
 OS Homo sapiens.
 XX US2002065394-A1.
 XX 30-MAY-2002.
 XX 22-DEC-2000; 2000US-0745763.
 XX 18-MAR-1998; 98US-0040963.
 XX (JACO/) JACOBS K.
 XX (MCCO/) MCCOY J M.
 XX (LAVA/) LAVALLIE E R.
 XX (COLL/) COLLINS-RACIE L A.
 XX (EVAN/) EVANS C.
 XX (MERB/) MERBERG D.
 XX (TREA/) TREACY M.
 XX (SPAU/) SPAULDING V.
 XX Jacobs K, McCoy JM, LaVallie ER, Collins-Racie LA, Evans C;
 XX Merberg D, Treacy M, Spaulding V;
 XX WPI; 2002-582343/62.
 XX N-PSDB; ABQ92017.
 XX Novel secreted or transmembrane protein and polynucleotide encoding the
 XX protein, useful for diagnosis and treatment of neurological disorders,
 XX cancer, autoimmune diseases, bone disorders and lung or liver fibrosis
 XX -
 XX Claim 54; Page 116-117; 284pp; English.
 XX The invention relates to human secreted or transmembrane protein (I),
 XX their fragments and is encoded by specific complementary deoxyribonucleic
 XX acid (cDNA) inserts (II), where the protein is substantially free from
 XX other mammalian proteins. (I) are useful for preventing, treating or
 XX ameliorating a medical condition, especially immunological treatment or
 XX prevention of tumours. (I) exhibits activity relating to angiogenesis,
 XX cytokine, cell proliferation, cell differentiation, antiinflammatory,
 XX stem cell growth factor activity and activin or inhibin-related
 XX activities. (I) can be used to manipulate stem cells in culture to give
 XX rise to neuroepithelial cells that can be used to augment or replace
 XX cells damaged by illness, autoimmune disease, accidental damage or
 XX genetic disorders. (I) induces the proliferation of neural cells and
 XX regeneration of nerve and brain tissue and is useful for the treatment of
 XX central and peripheral nervous system diseases and neuropathies, such as
 XX Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic
 XX lateral sclerosis. (I) is involved in chemotactic or chemokinetic
 XX activity, regulation of haematopoiesis and is useful for treating myeloid
 XX or lymphoid cell disorders, platelet disorders such as thrombocytopaenia
 XX and for regeneration of bone, cartilage, tendon, ligament and/or nerve
 XX tissue growth and in tissue repair, healing of burns, incisions, ulcers,
 XX for treating osteoporosis, osteoarthritis, bone degenerative disorders
 XX periodontal disease. (I) is also useful for gut protection or
 XX regeneration and treatment of lung or liver fibrosis, reperfusion injury
 XX in various tissues, various immune deficiencies and disorders including
 XX severe combined immunodeficiency (SCID), bacterial or fungal infections,
 XX autoimmune disorders e.g. multiple sclerosis, rheumatoid arthritis,

CC diabetes mellitus, myasthenia gravis, allergic reactions and conditions,
 CC such as asthma or other respiratory problems. (II) is useful to express
 CC recombinant protein, as markers for tissues in which the corresponding
 CC protein is preferentially expressed and in gene therapy. The present
 CC sequence is that of a polypeptide of the invention.

XX Sequence 298 AA;

Query Match 80.5%; Score 240; DB 23; Length 298;
 Best Local Similarity 100.0%; Pred. No. 5.2e-220;
 Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 59 SRLEWKKLGRSVSVFYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118
 |||||
 Db 59 SRLEWKKLGRSVSVFYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118
 |||||
 Qy 119 QNLEEDVTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTFWFKDGIIRLEN 178
 |||||
 Db 119 QNLEEDVTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTFWFKDGIIRLEN 178
 |||||
 Qy 179 PRLGSQSTNSSTYNTMTKTGLTQFNTVSKLDTGEYSCARNVGVYRRCPCGKRMQVDDLNIS 238
 |||||
 Db 179 PRLGSQSTNSSTYNTMTKTGLTQFNTVSKLDTGEYSCARNVGVYRRCPCGKRMQVDDLNIS 238
 |||||
 Qy 239 GIIAAVVVALVISVCGLVGYAQRKGYSKETSFKNSSSSKATTMSENDFKHTKSFII 298
 |||||
 Db 239 GIIAAVVVALVISVCGLVGYAQRKGYSKETSFKNSSSSKATTMSENDFKHTKSFII 298
 |||||

RESULT 10

AAO16452

ID AAO16452 standard; protein; 298 AA.

XX AAO16452;

DT 17-APR-2003 (first entry)

XX Human junctional adhesion molecule 2 (huJAM2).

XX Human; gene therapy; extracellular region; junctional adhesion molecules;
 KW huJAM; immune system disorder; immune deficiency; autoimmune disorder;
 KW inflammatory disorder; cancer; wound healing; cardiovascular disease;
 KW full-length membrane-bound huJAM protein.

OS Homo sapiens.

XX Key Location/Qualifiers
 FH Peptide 1..28
 FT /label= Signal_peptide
 FT Domain 29..236
 FT /note= "Extracellular domain; Specifically claimed
 FT region"
 FT Protein 29..298
 FT /note= "Mature huJAM2"

XX WO2003008541-A2.

PN 30-JAN-2003.

XX 05-JUL-2002; 2002WO-US19800.

XX 16-JUL-2001; 2001US-305752P.

PR 05-FEB-2002; 2002US-354345P.

XX (ELIL) LILLY & CO ELI.

XX Heuer JG, Smith RC, Su EW;

XX WPI; 2003-221848/21.

DR N-PSDB; AAL51599.

XX New extracellular human junctional adhesion molecule (huJAM)

PT polypeptide, useful for treating an immune system disorder such as an

PT immune deficiency or an inflammatory disorder, cancer, wound healing,
 PT or a cardiovascular disease -
 XX Disclosure; Fig 1; 131pp; English.

XX The invention comprises the DNA and protein sequences of the
 CC extracellular region of human junctional adhesion molecules (huJAM). The
 CC extracellular huJAM DNA and protein sequences are useful in the treatment
 CC of: immune system disorders (e.g. immune deficiency); autoimmune
 CC disorders; inflammatory disorders; cancer; wound healing; or a
 CC cardiovascular disease. The present amino acid sequence represents the
 CC full-length membrane-bound huJAM2 protein.

XX Sequence 298 AA;

Query Match 80.5%; Score 240; DB 24; Length 298;
 Best Local Similarity 100.0%; Pred. No. 5.2e-220;
 Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 59 SRLEWKKLGRSVSVFYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118
 |||||
 Db 59 SRLEWKKLGRSVSVFYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118
 |||||
 Qy 119 QNLEEDVTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTFWFKDGIIRLEN 178
 |||||
 Db 119 QNLEEDVTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTFWFKDGIIRLEN 178
 |||||
 Qy 179 PRLGSQSTNSSTYNTMTKTGLTQFNTVSKLDTGEYSCARNVGVYRRCPCGKRMQVDDLNIS 238
 |||||
 Db 179 PRLGSQSTNSSTYNTMTKTGLTQFNTVSKLDTGEYSCARNVGVYRRCPCGKRMQVDDLNIS 238
 |||||
 Qy 239 GIIAAVVVALVISVCGLVGYAQRKGYSKETSFKNSSSSKATTMSENDFKHTKSFII 298
 |||||
 Db 239 GIIAAVVVALVISVCGLVGYAQRKGYSKETSFKNSSSSKATTMSENDFKHTKSFII 298
 |||||

RESULT 11

AAO8060

ID AAO8060 standard; protein; 312 AA.

XX AAO8060;

DT 11-SEP-2000 (first entry)

XX Human PRO245 protein.

XX Inflammatory cell infiltration; immune response; T cell proliferation;
 KW anti-inflammatory; anti-autoimmune; anti-diabetic; spondyloarthritis;
 KW T cell-mediated disease; spondyloarthritis; sclerosis; renal disease;
 KW inflammatory myopathy; hemolytic anemia; thrombocytopenia; thyroiditis;
 KW diabetes mellitus; demyelinating polyneuropathy; Guillain-Barre syndrome;
 KW multiple sclerosis; polynuropathy; hepatitis; cirrhosis; enteropathy;
 KW sclerosing cholangitis; inflammatory bowel disease; Whipple's disease;
 KW skin disease; dermatitis; psoriasis; asthma; allergic rhinitis; tumor;
 KW food hypersensitivity; urticaria; eosinophilic pneumonia; transplant;
 KW idiopathic pulmonary fibrosis; graft rejection; PRO245; human.

OS Homo sapiens.

XX WO9914241-A2.

XX 25-MAR-1999.

PF 17-SEP-1998; 98WO-US19437.

XX 17-SEP-1997; 97US-0059119.

PR 18-SEP-1997; 97US-0059263.

PR 28-OCT-1997; 97US-0063550.

PR 12-NOV-1997; 97US-0065186.

PR 21-NOV-1997; 97US-0066364.

PR 24-NOV-1997; 97US-0066770.

PR 04-JUN-1998; 98US-0086026.

PA (GETH) GENENTECH INC.
 XX Fong S, Goddard A, Gurney AL, Tumas D, Wood WI;
 PI WPI; 1999-229499/19.
 DR N-PSDB; AAX37664.
 DR
 XX Composition containing novel polypeptide PRO245, its agonist or
 PT antagonist -
 XX
 XX Example 1; Fig 2; 177pp; English.
 XX
 CC This invention describes a novel composition containing (apart from a
 CC carrier or excipient), a novel PRO245 polypeptide (I), its agonist or
 CC antagonist, or their fragments, for modulating: (i) infiltration of
 CC inflammatory cells into tissue; (ii) an immune response; or (iii) T cell
 CC proliferation. The composition increases or decreases any of the effects
 CC (i)-(iii). The products of the invention have anti-inflammatory,
 CC anti-autoimmune and anti-diabetic activity. (I), and its (ant)agonists
 CC and their fragments, are used to treat immune-related diseases,
 CC particularly T cell-mediated diseases. The diseases treated include
 CC systemic lupus erythematosus, rheumatoid arthritis, juvenile chronic
 CC arthritis, spondyloarthropathies, systemic sclerosis (scleroderma),
 CC idiopathic inflammatory myopathies (dermatomyositis, polymyositis),
 CC Sjogren's syndrome, systemic vasculitis, sarcoidosis, autoimmune
 CC hemolytic anemia (immune pancytopenia, paroxysmal nocturnal
 CC purpura immune-mediated thrombocytopenia) (idiopathic thrombocytopenic
 CC purpura immune-mediated thrombocytopenia), thyroiditis (Grave's disease,
 CC Hashimoto's thyroiditis, juvenile lymphocytic thyroiditis, atrophic
 CC thyroiditis), diabetes mellitus, immune-mediated renal disease
 CC (glomerulonephritis, tubulointerstitial nephritis), multiple sclerosis,
 CC idiopathic demyelinating polyneuropathy, Guillain-Barre syndrome, chronic
 CC inflammatory demyelinating polyneuropathy, infectious hepatitis
 CC (hepatitis A, B, C, D, E and other non-hepatotropic viruses), autoimmune
 CC chronic active hepatitis, primary biliary cirrhosis, granulomatous
 CC hepatitis, and sclerosing cholangitis, inflammatory bowel disease
 CC (ulcerative colitis; Crohn's disease), gluten-sensitive enteropathy, and
 CC Whipple's disease. Autoimmune or immune-mediated skin diseases including
 CC bullous skin diseases, erythema multiforme, contact dermatitis, psoriasis,
 CC asthma, allergic rhinitis, atopic dermatitis, food hypersensitivity,
 CC urticaria, eosinophilic pneumonia, idiopathic pulmonary fibrosis,
 CC hypersensitivity pneumonitis, and transplantation associated diseases
 CC (graft rejection, and graft-versus-host-disease). (I), its (ant)agonists
 CC or fragment can also be used as an adjuvant in treatment of tumors.
 CC Antibodies against (I) can also be used for diagnosing such diseases.
 CC This sequence represents the human PRO245 protein described in the
 CC invention.
 XX
 XX Sequence 312 AA;
 XX
 XX Query Match 77.2%; Score 230; DB 20; Length 312;
 XX Best Local Similarity 100.0%; Pred. No. 1.8e-210;
 XX Mismatches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 59 SRLEKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVRSDAGKYRCEVSAPSEQ 118
 Db 59 SRLEKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVRSDAGKYRCEVSAPSEQ 118
 QY 119 QNLEEDTTLVLVAVAPVSPCEVPSSALSGTVVLELRCQDKGNPAPEYTFWKDGIRLLEN 178
 Db 119 QNLEEDTTLVLVAVAPVSPCEVPSSALSGTVVLELRCQDKGNPAPEYTFWKDGIRLLEN 178
 QY 179 PRLGSTNSSTYMTNKTGLQNTVSKLDTGBYSCEARNSVGYRCPGKRMQVDDLNTS 238
 Db 179 PRLGSTNSSTYMTNKTGLQNTVSKLDTGBYSCEARNSVGYRCPGKRMQVDDLNTS 238
 QY 239 GIIAAVVVALVISVCGLGVCVQAQRKGYFSKETSFOKSNSSSKATTMSN 288
 Db 239 GIIAAVVVALVISVCGLGVCVQAQRKGYFSKETSFOKSNSSSKATTMSN 288
 RESULT 12
 AAY23324

AAV23324 standard; Protein; 312 AA.
 AAY23324;
 02-SEP-1999 (first entry)
 A33 related antigen PRO245.
 A33 related antigen; PRO301; PRO362; PRO245; inflammatory disease;
 tumour.
 Homo sapiens.
 WO9927098-A2.
 03-JUN-1999.
 20-NOV-1998; 98WO-US24855.
 17-SEP-1998; 98WO-US19437.
 21-NOV-1997; 97US-0066364.
 20-MAR-1998; 98US-0078936.
 (GETH) GENENTECH INC.
 Ashkenazi A, Fong S, Goddard A, Gurney AL, Napier MA;
 Tumas D, Wood WI;
 WPI; 1999-404743/34.
 N-PSDB; AAX81770.
 Antigens PRO301, PRO362 and PRO245 related to A33
 Example 3; Fig 11; 122pp; English.
 The specification describes A33 related antigens PRO301, PRO362 and
 PRO245. The methods and compositions of the invention are useful for the
 treatment and diagnosis of inflammatory disease and tumours in mammals.
 Such inflammatory diseases include of inflammatory bowel disease,
 systemic lupus erythematosus, rheumatoid arthritis, juvenile chronic
 arthritis, spondyloarthropathies, systemic sclerosis, scleroderma,
 idiopathic inflammatory myopathies, dermatomyositis, polymyositis,
 Sjogren's syndrome, systemic vasculitis, sarcoidosis, autoimmune hemolytic
 anemia, immune pancytopenia, paroxysmal nocturnal hemoglobinuria,
 autoimmune thrombocytopenia, idiopathic thrombocytopenic purpura,
 immune-mediated thrombocytopenia, thyroiditis, Grave's disease,
 Hashimoto's thyroiditis, juvenile lymphocytic thyroiditis, atrophic
 thyroiditis, diabetes mellitus, immune-mediated renal disease,
 glomerulonephritis, tubulointerstitial nephritis, demyelinating diseases
 of the central and peripheral nervous systems such as multiple sclerosis,
 idiopathic polyneuropathy, hepatobiliary diseases, infectious hepatitis,
 A, B, C, D, E, nonhepatotropic viruses, autoimmune chronic active
 hepatitis, primary biliary cirrhosis, granulomatous hepatitis, sclerosing
 cholangitis, inflammatory and fibrotic lung diseases, gluten-sensitive
 enteropathy, Whipple's disease, autoimmune or immune-mediated skin
 diseases allergic diseases of the lung such as eosinophilic pneumonias,
 idiopathic pulmonary fibrosis and hypersensitivity pneumonitis
 transplantation associated diseases disease. The present sequence
 represents PRO245.

Query Match 77.2%; Score 230; DB 20; Length 312;
 Best Local Similarity 100.0%; Pred. No. 1.8e-210;
 Mismatches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 59 SRLEKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVRSDAGKYRCEVSAPSEQ 118
 Db 59 SRLEKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVRSDAGKYRCEVSAPSEQ 118
 QY 119 QNLEEDTTLVLVAVAPVSPCEVPSSALSGTVVLELRCQDKGNPAPEYTFWKDGIRLLEN 178
 Db 119 QNLEEDTTLVLVAVAPVSPCEVPSSALSGTVVLELRCQDKGNPAPEYTFWKDGIRLLEN 178

QY 179 PRLGQSTNSSYTMNTKTGLQFNTVSKLDTGEYSCARNVGVYRCPCGRKQVDDLNIS 238
DB 179 PRLGQSTNSSYTMNTKTGLQFNTVSKLDTGEYSCARNVGVYRCPCGRKQVDDLNIS 238
QY 239 GIIAAVVVVVALVISVGLGVCYAQRKGYSKETSFKQSNSSSKATTMSSEN 288
DB 239 GIIAAVVVVVALVISVGLGVCYAQRKGYSKETSFKQSNSSSKATTMSSEN 288
RESULT 13
ID AAY13354
AC AAY13354
XX AAY13354
XX AAY13354
DT 25-JUN-1999 (first entry)
DE Amino acid sequence of protein PRO245.
XX Secreted protein; transmembrane protein; human; enterocolitis;
KW Zollinger-Ellison syndrome; gastrointestinal ulceration;
KW congenital microvillus atrophy; skin disease; cell growth;
KW abnormal keratinocyte differentiation; psoriasis; epithelial cancer;
KW Parkinson's disease; Alzheimer's disease; ALS; neuropathy;
KW fibromodulin; dermal scarring; Usher Syndrome; Atrophia areata;
KW anti-thrombotic; wound healing; tissue repair.
XX Homo sapiens.
XX OS
XX WO9914328-A2.
XX PD
XX 25-MAR-1999.
XX 16-SEP-1998; 98WO-US19330.
XX 25-NOV-1997; 97US-0066840.
PR 17-SEP-1997; 97US-0059113.
PR 17-SEP-1997; 97US-0059115.
PR 17-SEP-1997; 97US-0059117.
PR 17-SEP-1997; 97US-0059119.
PR 17-SEP-1997; 97US-0059121.
PR 17-SEP-1997; 97US-0059122.
PR 17-SEP-1997; 97US-0059184.
PR 18-SEP-1997; 97US-0059263.
PR 18-SEP-1997; 97US-0059266.
PR 15-OCT-1997; 97US-0062128.
PR 17-OCT-1997; 97US-0062285.
PR 17-OCT-1997; 97US-0062287.
PR 21-OCT-1997; 97US-0063486.
PR 24-OCT-1997; 97US-0062814.
PR 24-OCT-1997; 97US-0062816.
PR 24-OCT-1997; 97US-0063045.
PR 24-OCT-1997; 97US-0063120.
PR 24-OCT-1997; 97US-0063121.
PR 24-OCT-1997; 97US-0063127.
PR 24-OCT-1997; 97US-0063128.
PR 27-OCT-1997; 97US-0063329.
PR 27-OCT-1997; 97US-0063327.
PR 28-OCT-1997; 97US-0063341.
PR 28-OCT-1997; 97US-0063542.
PR 28-OCT-1997; 97US-0063544.
PR 28-OCT-1997; 97US-0063549.
PR 28-OCT-1997; 97US-0063550.
PR 28-OCT-1997; 97US-0063564.
PR 29-OCT-1997; 97US-0063435.
PR 29-OCT-1997; 97US-0063704.
PR 29-OCT-1997; 97US-0063732.
PR 29-OCT-1997; 97US-0063738.
PR 29-OCT-1997; 97US-0063734.
PR 29-OCT-1997; 97US-0064215.
PR 29-OCT-1997; 97US-0063735.
PR 31-OCT-1997; 97US-0063870.

PR 31-OCT-1997; 97US-0064103.
PR 03-NOV-1997; 97US-0064248.
PR 07-NOV-1997; 97US-0064809.
PR 12-NOV-1997; 97US-0065186.
PR 17-NOV-1997; 97US-0065846.
PR 18-NOV-1997; 97US-0065693.
PR 21-NOV-1997; 97US-0066120.
PR 21-NOV-1997; 97US-0066364.
PR 24-NOV-1997; 97US-0066772.
PR 24-NOV-1997; 97US-0066466.
PR 24-NOV-1997; 97US-0066770.
PR 24-NOV-1997; 97US-0066511.
PR 24-NOV-1997; 97US-0066453.
XX (GETH) GENENTECH INC.
XX PA
XX PI Chen J, Goddard A, Gurney AL, Pennica D, Wood WI, Yuan J;
XX DR WPI; 1999-229533/19.
XX DR N-PSDB; AAX52225.
XX PT New isolated human genes and polypeptides used in, e.g. treatment of
XX PS gastrointestinal ulceration
XX PS Claim 12; Fig 24; 320pp; English.
XX CC AAY13344-403 represent secreted and transmembrane human proteins.
CC The cDNA sequences are obtained from cDNA libraries, prepared from
CC fetal lung, fetal kidney, fetal brain, fetal liver and fetal retina.
CC The encoded polypeptides have specific uses based on their homology to
CC known polypeptides, e.g. PRO211 and PRO217 can be used for disorders
CC associated with the preservation and maintenance of gastrointestinal
CC mucosa and the repair of acute and chronic mucosal lesions
CC (e.g. enterocolitis, Zollinger-Ellison syndrome, gastrointestinal
CC ulceration and congenital microvillus atrophy), skin diseases associated
CC with abnormal keratinocyte differentiation (e.g. psoriasis, epithelial
CC cancers such as lung squamous cell carcinoma of the vulva and gliomas),
CC potent effects on cell growth and development, diseases related to
CC growth or survival of nerve cells including Parkinson's disease,
CC Alzheimer's disease, ALS, neuropathies or cancer. PRO265 can be used as
CC for fibromodulin, e.g. for reducing dermal scarring. PRO264 can be used
CC as a target for anti-tumor drugs. PRO533 may be used in the treatment
CC of Usher Syndrome or Atrophia areata; PRO269 can be used as an
CC anti-thrombotic agent; PRO287 polypeptides and portions may have
CC therapeutic applications in wound healing and tissue repair; PRO317 can
CC be used for treating problems of the kidney, uterus, endometrium, blood
CC vessels, or related tissue, e.g. in the heart of genital tract.
XX SQ Sequence 312 AA;
Query Match 77.2%; Score 230; DB 20; Length 312;
Best Local Similarity 100.0%; Pred. No. 1.8e-210;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 59 SRLEWKKLGRSVSFVYQQTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYCEVSAPSEQ 118
DB 59 SRLEWKKLGRSVSFVYQQTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYCEVSAPSEQ 118
QY 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVLELRCQDKGNPAPETWFKDGIRLLEN 178
DB 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVLELRCQDKGNPAPETWFKDGIRLLEN 178
QY 179 PRLGQSTNSSYTMNTKTGLQFNTVSKLDTGEYSCARNVGVYRCPCGRKQVDDLNIS 238
DB 179 PRLGQSTNSSYTMNTKTGLQFNTVSKLDTGEYSCARNVGVYRCPCGRKQVDDLNIS 238
QY 239 GIIAAVVVVVALVISVGLGVCYAQRKGYSKETSFKQSNSSSKATTMSSEN 288
DB 239 GIIAAVVVVVALVISVGLGVCYAQRKGYSKETSFKQSNSSSKATTMSSEN 288
RESULT 14
AAB33421

ID AAB33421 standard; Protein; 312 AA.
 XX AAB33421;
 AC
 XX 29-JAN-2001 (first entry)
 DT
 XX Human PRO245 protein UNQ219 SEQ ID NO:36.
 DE
 XX Human; immune related disease; diagnosis; antinflammatory; cardiant;
 KW dermatological; antiarthritic; antirheumatic; immunosuppressive;
 KW haemostatic; antithyroid; antidiabetic; nootropic; neuroprotective;
 KW antianaemic; hepatotropic; virucide; antipsoriatic; antiallergic;
 KW osteoarthritis; systemic lupus erythematosus; rheumatoid arthritis;
 KW idiopathic inflammatory myopathy; Sjogren's syndrome; thyroiditis;
 KW systemic vasculitis; autoimmune haemolytic anaemia; diabetes mellitus;
 KW autoimmune thrombocytopenia; immune-mediated renal disease;
 KW demyelinating disease; hepatobiliary disease; Whipple's disease;
 KW inflammatory bowel disease; gluten-sensitive enteropathy;
 KW autoimmune disease; immune-mediated skin disease; allergic disease;
 KW immunological disease; transplantation associated disease;
 KW graft rejection; graft-versus-host-disease.
 XX
 OS Homo sapiens.
 XX
 PN WO200053758-A2.
 XX
 PD 14-SEP-2000.
 XX
 XX 02-MAR-2000; 2000WO-US05841.
 PF
 XX 08-MAR-1999; 99WO-US05028.
 PR 10-MAR-1999; 99US-0123618.
 PR 12-MAR-1999; 99US-0123957.
 PR 23-MAR-1999; 99US-0125775.
 PR 12-APR-1999; 99US-0128849.
 PR 20-APR-1999; 99WO-US08615.
 PR 28-APR-1999; 99US-0131445.
 PR 04-MAY-1999; 99US-0132371.
 PR 14-MAY-1999; 99US-0134287.
 PR 23-JUN-1999; 99WO-US12252.
 PR 23-JUN-1999; 99US-0141037.
 PR 20-JUL-1999; 99US-0144758.
 PR 26-JUL-1999; 99US-0145698.
 PR 28-JUL-1999; 99US-0146222.
 PR 01-SEP-1999; 99WO-US20111.
 PR 08-SEP-1999; 99WO-US20594.
 PR 13-SEP-1999; 99WO-US20944.
 PR 15-SEP-1999; 99WO-US21090.
 PR 15-SEP-1999; 99WO-US21547.
 PR 05-OCT-1999; 99WO-US23089.
 PR 29-OCT-1999; 99US-0162506.
 PR 30-NOV-1999; 99WO-US28214.
 PR 30-NOV-1999; 99WO-US28313.
 PR 30-NOV-1999; 99WO-US28409.
 PR 01-DEC-1999; 99WO-US28301.
 PR 01-DEC-1999; 99WO-US28634.
 PR 02-DEC-1999; 99WO-US28551.
 PR 02-DEC-1999; 99WO-US28564.
 PR 02-DEC-1999; 99WO-US28565.
 PR 16-DEC-1999; 99WO-US30095.
 PR 20-DEC-1999; 99WO-US30999.
 PR 30-DEC-1999; 99WO-US31274.
 PR 05-JAN-2000; 2000WO-US00219.
 PR 06-JAN-2000; 2000WO-US00277.
 PR 11-FEB-2000; 2000WO-US03565.
 PR 18-FEB-2000; 2000WO-US04341.
 PR 22-FEB-2000; 2000WO-US04342.
 PR 22-FEB-2000; 2000WO-US04414.
 (GETH) GENENTECH INC.
 PA
 XX

PI Aahkenazi AJ, Baker KP, Goddard A, Gurney AL, Hebert C, Henzel W;
 PI Kabakoff RC, Lu Y, Pan J, Pennica D, Shelton DL, Smith V;
 PI Stewart TA, Tumas D, Watanabe CK, Wood WI, Yan M;
 XX
 DR WPI; 2000-572271/53.
 DR N-PSDB; AAC58586.
 XX
 PT Sixty four PRO polypeptides, useful in the diagnosis and treatment of
 PT immune related disorders, e.g. systemic lupus erythematosus, rheumatoid
 PT arthritis, osteoarthritis, thyroiditis and diabetes mellitus -
 XX
 PS Claim 33; Fig 16; 309pp; English.
 XX
 CC The present invention describes sixty four human PRO proteins which can
 CC be used in the treatment of immune related diseases. The human PRO
 CC proteins, anti-PRO antibodies, agonists and antagonists are useful for
 CC treating and diagnosing immune related disorders. The disorders are
 CC selected from systemic lupus erythematosus, rheumatoid arthritis,
 CC osteoarthritis, juvenile chronic arthritis, spondyloarthropathies,
 CC systemic sclerosis, idiopathic inflammatory myopathies, Sjogren's
 CC syndrome, systemic vasculitis, sarcoidosis, autoimmune haemolytic
 CC anaemia, autoimmune thrombocytopenia, thyroiditis, diabetes mellitus,
 CC immune-mediated renal disease, demyelinating diseases of the central
 CC and peripheral nervous systems, hepatobiliary diseases, inflammatory
 CC bowel disease, gluten-sensitive enteropathy and Whipple's disease,
 CC autoimmune or immune-mediated skin diseases, allergic diseases,
 CC immunological diseases of the lung, and transplantation associated
 CC diseases including graft rejection and graft-versus-host-disease.
 CC AAC58397 to AAC58578 represent PCR primers and hybridisation probes used
 CC in the isolation of human PRO sequences. AAC58579 to AAC58642 and
 CC AAB33414 to AAB33477 represent human PRO polynucleotide and protein
 CC sequences given in the exemplification of the present invention.
 XX
 SQ Sequence 312 AA;
 Query Match 77.2%; Score 230; DB 21; Length 312;
 Best Local Similarity 100.0%; Pred. No. 1.8e-210;
 Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 59 SRLEWKLGSRVSFVYQQTLOGDFKNRAEMIDFNIRKNVTRSDAGKYRCEVSAPSEQ 118
 DB |||||
 59 SRLEWKLGSRVSFVYQQTLOGDFKNRAEMIDFNIRKNVTRSDAGKYRCEVSAPSEQ 118
 QY 119 QNLEEDTVTLVLVAPVSPCEVPSSALSGTVELRCQDEKGNPAPEYTFWKDGIRLEN 178
 DB |||||
 119 QNLEEDTVTLVLVAPVSPCEVPSSALSGTVELRCQDEKGNPAPEYTFWKDGIRLEN 178
 QY 179 PRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNIS 238
 DB |||||
 179 PRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNIS 238
 QY 239 GIIAAVVVVALVISVCGLVGVCAQRKGYSFKTSFKQSNSSSKATTMSN 288
 DB |||||
 239 GIIAAVVVVALVISVCGLVGVCAQRKGYSFKTSFKQSNSSSKATTMSN 288
 RESULT 15
 AAB24401
 ID AAB24401 standard; Protein; 312 AA.
 XX
 AC AAB24401;
 XX
 XX 07-NOV-2000 (first entry)
 DT
 XX Human PRO245 protein sequence SEQ ID NO:67.
 DE
 XX Human; PRO; promotion; inhibition; angiogenesis; cardiovascularisation;
 KW diagnosis; trauma; wound; cancer; atherosclerosis; cardiac hypertrophy;
 KW angiogenic; proliferative; cardiant; cardiovascular; antiatherosclerotic;
 KW cytostatic; gene therapy; vaccine.
 XX
 OS Homo sapiens.
 XX

PN WO200032221-A2.
XX
PD
XX
XX 08-JUN-2000.
PF 30-NOV-1999; 99WO-US283113.
XX
XX 01-DEC-1998; 98WO-US25108.
PR 16-DEC-1998; 98US-0112850.
PR 12-JAN-1999; 99US-0115554.
PR 08-MAR-1999; 99WO-US05028.
PR 12-MAR-1999; 99US-0123957.
PR 28-APR-1999; 99US-0131445.
PR 14-MAY-1999; 99US-0134287.
PR 02-JUN-1999; 99WO-US12252.
PR 23-JUN-1999; 99US-0141037.
PR 20-JUL-1999; 99US-0144758.
PR 26-JUL-1999; 99US-0145698.
PR 01-SEP-1999; 99WO-US20111.
PR 08-SEP-1999; 99WO-US20594.
PR 13-SEP-1999; 99WO-US20944.
PR 15-SEP-1999; 99WO-US21090.
PR 15-SEP-1999; 99WO-US21547.
PR 05-OCT-1999; 99WO-US23089.
PR 23-OCT-1999; 99US-0162506.
XX
PA (GETH) GENENTECH INC.
XX
XX Ashkenazi AJ, Baker KP, Ferrara N, Gerber H, Hillan KJ, Goddard A;
PI Godowski PJ, Gurney AL, Klein RD, Kuo SS, Paoni NF, Smith V;
PI Watanabe CK, Williams PM, Wood WI;
XX
DR WPI; 2000-412154/35.
DR N-PSDB; AAA77562.
XX
XX Nucleic acids encoding PRO polypeptides useful for preventing
PT diagnosing and treating diagnosing a cardiovascular, endothelial or
PT angiogenic disorders in mammals -
XX
XX Claim 72; Fig 28; 315pp; English.
XX
XX The present invention describes nucleic acids encoding PRO polypeptides
CC useful for preventing, diagnosing and treating diagnosing a
CC cardiovascular, endothelial or angiogenic disorder in mammals by
CC modulating cell proliferation, angiogenesis and cardiovascularisation,
CC and for identifying agonists and antagonists of these processes. The
CC nucleic acids and the proteins they encode may be used in the
CC prevention, treatment and diagnosis of diseases associated with
CC inappropriate PRO expression such as cardiovascular, endothelial or
CC angiogenic disorders in mammals (e.g. atherosclerosis, cancers and
CC cardiac hypertrophy). For example, the nucleic acids (NCs) and vectors
CC containing them and the PRO polypeptide may be used to treat disorders
CC associated with decreased PRO expression. AAA77510 to AAA77721 and
CC AAB24388 to AAB24435 represent nucleotide and protein sequences used in
CC the exemplification of the present invention.
XX
SQ Sequence 312 AA;

Query Match 77.2%; Score 230; DB 21; Length 312;
Best Local Similarity 100.0%; Pred. No. 1.8e-210;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 59 SRLEWKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEQ 118
DB 59 SRLEWKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEQ 118
QY 119 QNLEEDTVTLVLVAPVAPVCEVPSSALSGTVVELRCQKGNPAPEYTFWKDGIRLLEN 178
DB 119 QNLEEDTVTLVLVAPVAPVCEVPSSALSGTVVELRCQKGNPAPEYTFWKDGIRLLEN 178
QY 179 PRLGSGSTNSYTMNTKTGTLQFNTVSKLDTEYSCEARNVGYRRCGKRMQVDDLNIS 238
DB 179 PRLGSGSTNSYTMNTKTGTLQFNTVSKLDTEYSCEARNVGYRRCGKRMQVDDLNIS 238

QY 239 GIITAAVVVVVALVISVCGLGVCYAQRKGYSKETSFOKSNSSSKATTMSEN 288
DB 239 GIITAAVVVVVALVISVCGLGVCYAQRKGYSKETSFOKSNSSSKATTMSEN 288

Search completed: December 9, 2003, 17:36:04
Job time : 55.6481 secs

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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:34:36 ; Search time 15.5749 Seconds
(without alignments)
809.548 Million cell updates/sec

Title: US-09-852-797-76
Perfect score: 298
Sequence: 1 MARRSRHRLLLRLVVA.....SSKATMSSEDFKHTKSFII 298

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 328717 seqs, 42310858 residues

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2: /cgn2_6/ptodata/1/1aa/5B-COMB.pap:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	296	99.3	298	4	US-09-152-060-76
2	230	77.2	312	4	US-09-254-465A-9

ALIGNMENTS

RESULT 1
US-09-152-060-76
; Sequence 76, Application US/09152060
; Patent No. 6448230
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003P1.US
; CURRENT APPLICATION NUMBER: US/09/152,060
; EARLIER FILING DATE: 1998-09-11
; EARLIER APPLICATION NUMBER: PCT/US98/04858
; EARLIER FILING DATE: 1998-03-12
; EARLIER APPLICATION NUMBER: 60/040,762
; EARLIER FILING DATE: 1997-03-14
; EARLIER APPLICATION NUMBER: 60/040,710
; EARLIER FILING DATE: 1997-03-14
; EARLIER APPLICATION NUMBER: 60/050,934
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/048,100
; EARLIER FILING DATE: 1997-05-30

; EARLIER APPLICATION NUMBER: 60/048,357
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/048,189
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/057,765
; EARLIER FILING DATE: 1997-09-05
; EARLIER APPLICATION NUMBER: 60/048,970
; EARLIER FILING DATE: 1997-06-06
; EARLIER APPLICATION NUMBER: 60/068,168
; EARLIER FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 118
; SOFTWARE: Patent in Ver. 2.0
; SEQ ID NO 76
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-152-060-76

Query Match 99.3%; Score 296; DB 4; Length 298;
Best Local Similarity 100.0%; Pred. No. 8.9e-276;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DB 1 MARRSRHRLLLRLVVALGYHAYGFSAPKQDQVTVAVXYQBAAILACKTPKKTVXSR 60
QY 61 LEWKGLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGN 120
DB 61 LEWKGLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGN 120
QY 121 LEEDTVTLLEVLVAPAVPSCEVPSSALSGTVVELRCQDEKGNPAPRYTWKQGIIRLLENPR 180
DB 121 LEEDTVTLLEVLVAPAVPSCEVPSSALSGTVVELRCQDEKGNPAPRYTWKQGIIRLLENPR 180
QY 181 LGSQSTNSSYTMNTKTGTLOFNTVSKLDTGYSCEARNISVGRRCPGKRMQVDDLNISGI 240
DB 181 LGSQSTNSSYTMNTKTGTLOFNTVSKLDTGYSCEARNISVGRRCPGKRMQVDDLNISGI 240
QY 241 IAAVVVALVTSVCGLVGVYQAKRGYFSKETSFOKSNSSSKATMSSEDFKHTKSFII 298
DB 241 IAAVVVALVTSVCGLVGVYQAKRGYFSKETSFOKSNSSSKATMSSEDFKHTKSFII 298

RESULT 2

US-09-254-465A-9
; Sequence 9, Application US/09254465A
; Patent No. 6410708
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; TITLE OF INVENTION: OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
; FILE REFERENCE: P1216R1(US)
; CURRENT APPLICATION NUMBER: US/09/254,465A
; EARLIER FILING DATE: 1999-03-05
; PRIOR APPLICATION NUMBER: PCT/US98/24855
; EARLIER FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: US 60/066,364
; EARLIER FILING DATE: 1997-11-21

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; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 9
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-254-465A-9

Query Match      77.2%; Score 230; DB 4; Length 312;
Best Local Similarity 100.0%; Pred. No. 1.7e-212;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 59 SRLEWKKGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

QY 119 QNLEEDTVTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGPNPAPEYTWFKDGIRLLEN 178
Db 119 QNLEEDTVTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGPNPAPEYTWFKDGIRLLEN 178

QY 179 PRIGSQSTNSSYTMNTKTGTQLQNTVSKLDTGEYSCEARNVGYRRCPCGRMQVDDLNIS 238
Db 179 PRIGSQSTNSSYTMNTKTGTQLQNTVSKLDTGEYSCEARNVGYRRCPCGRMQVDDLNIS 238

QY 239 GIIAAVVVALVISVGLGVCAQRKGYSKETSFOKSNSSSKATTMSSEN 288
Db 239 GIIAAVVVALVISVGLGVCAQRKGYSKETSFOKSNSSSKATTMSSEN 288
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Search completed: December 9, 2003, 17:39:14
Job time : 15.5749 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: December 9, 2003, 17:38:14 ; Search time 35.8223 Seconds
(without alignments)
1547.168 Million cell updates/sec

Title: US-09-852-797-76

Perfect score: 298

Sequence: 1 MARRSRHRLLLLLRYLVA.....SSKATTMSNDPKTKTSPFI 298

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 684280 seqs, 185983659 residues

Word size: 30

Total number of hits satisfying chosen parameters: 489

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database: Published Applications AA:*

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3: /cgn2_6/ptodata/1/pubpaa/US05_NEW_PUB.pep.*
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5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep.*
6: /cgn2_6/ptodata/1/pubpaa/PTCTUS_PUBCOMB.pep.*
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11: /cgn2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep.*
12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
13: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep.*
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16: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
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4	240	80.5	298	9	US-09-745-763-38
5	240	80.5	298	9	US-09-799-777-30
6	240	80.5	298	15	US-10-139-849-2
7	240	80.5	298	15	US-10-132-791-2
8	230	77.2	312	10	US-09-903-320-64
9	230	77.2	312	10	US-09-909-088B-64
10	230	77.2	312	10	US-09-905-291A-64
11	230	77.2	312	10	US-09-953-499-9
12	230	77.2	312	10	US-09-902-853-64
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16	230	77.2	312	11	US-09-906-742-64
17	230	77.2	312	11	US-09-906-838-64
18	230	77.2	312	11	US-09-907-613-64
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20	230	77.2	312	11	US-09-904-859-64
21	230	77.2	312	11	US-09-909-204-64
22	230	77.2	312	11	US-09-904-820-64
23	230	77.2	312	11	US-09-904-786-64
24	230	77.2	312	11	US-09-906-646-64
25	230	77.2	312	11	US-09-906-700-64
26	230	77.2	312	11	US-09-903-786-64
27	230	77.2	312	11	US-09-902-903-64
28	230	77.2	312	11	US-09-903-749A-64
29	230	77.2	312	11	US-09-904-119-64
30	230	77.2	312	11	US-09-904-556-64
31	230	77.2	312	11	US-09-902-736-64
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36	230	77.2	312	11	US-09-902-692-64
37	230	77.2	312	11	US-09-903-520-64
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42	230	77.2	312	11	US-09-905-088-64
43	230	77.2	312	11	US-09-907-575-64
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ALIGNMENTS

RESULT 1

US-09-853-161-76
; Sequence 76, Application US/09853161
; Patent No. US20020076756A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: PZ003P3
; CURRENT APPLICATION NUMBER: US/09/853,161
; CURRENT FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/265,583
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 09/152,060
; PRIOR FILING DATE: 1998-09-11
; PRIOR APPLICATION NUMBER: PCT/US98/04858
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/040,762
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/040,710
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/050,934
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,100
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,357
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,189
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/057,765
; PRIOR FILING DATE: 1997-09-05
; PRIOR APPLICATION NUMBER: 60/048,970
; PRIOR FILING DATE: 1997-06-06
; PRIOR APPLICATION NUMBER: 60/068,368
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 118
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76
; LENGTH: 298

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; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-853-161-76

Query Match          99.3%; Score 296; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 2.5e-269;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MARRSRRLRLLLRLYLVALGYHKA YGFSAPKQQQVVTA VXYQEAILACKTPKKT VYKSR 60
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Qy 61 LEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVT RSDAGKYRCEVSA PSEOGQN 120
Db 61 LEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVT RSDAGKYRCEVSA PSEOGQN 120
Qy 121 LEEDTVTLVLVAPVPSCVPSSALSGTVVLELRCQDKEG NPAPETWFKDGI RLLNPR 180
Db 121 LEEDTVTLVLVAPVPSCVPSSALSGTVVLELRCQDKEG NPAPETWFKDGI RLLNPR 180
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Db 181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRCPGKRMQVDDLNISGI 240
Qy 241 IAAVVVVVALVISVCGLVGCYVQAQRKGYSFKTSFQKSNSSSKATTTMSNDPFKHTKSFII 298
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RESULT 2
US-09-852-659A-76
; Sequence 76, Application US/09852659A
; Patent No. US20020077287A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003P4
; CURRENT APPLICATION NUMBER: US/09/852,659A
; PRIOR FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/265,583
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 09/152,060
; PRIOR FILING DATE: 1998-09-11
; PRIOR APPLICATION NUMBER: PCT/US98/04858
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/040,762
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/040,710
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/050,934
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,100
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,357
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,189
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/057,765
; PRIOR FILING DATE: 1997-09-05
; PRIOR APPLICATION NUMBER: 60/048,970
; PRIOR FILING DATE: 1997-06-06
; PRIOR APPLICATION NUMBER: 60/068,368
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 121
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76

US-09-852-797-76
; Sequence 76, Application US/09852797
; Patent No. US2002017294A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003P2
; CURRENT APPLICATION NUMBER: US/09/852,797
; PRIOR FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/265,583
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 09/152,060
; PRIOR FILING DATE: 1998-09-11
; PRIOR APPLICATION NUMBER: PCT/US98/04858
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/040,762
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/040,710
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/050,934
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,100
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,357
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,189
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/057,765
; PRIOR FILING DATE: 1997-09-05
; PRIOR APPLICATION NUMBER: 60/048,970
; PRIOR FILING DATE: 1997-06-06
; PRIOR APPLICATION NUMBER: 60/068,368
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 118
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SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 76
LENGTH: 298
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SITE
LOCATION: (42)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (58)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-852-797-76

Query Match 99.3%; Score 296; DB 10; Length 298;
Best Local Similarity 100.0%; Pred. No. 2.5e-269; Indels 0; Gaps 0;
Matches 298; Conservative 0; Mismatches 0;

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DB 1 MARRSRRLRLRLRLVVALGYHKAQYGFAPKQDQVVTAVXQEAAILACKTKPKTVXSR 60
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QY 121 LLEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
DB 121 LLEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
QY 181 LGSQSTNSSTYMTKTGTQLQNTVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDLNISGI 240
DB 181 LGSQSTNSSTYMTKTGTQLQNTVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDLNISGI 240
QY 241 IAAVVVALVISVGLGVCAQYRKGYSKETSFOKSNSSSKATTMSNDPKHTKSFII 298
DB 241 IAAVVVALVISVGLGVCAQYRKGYSKETSFOKSNSSSKATTMSNDPKHTKSFII 298

RESULT 4

US-09-745-763-38

Sequence 38, Application US/09745763

Patent No. US20020065394A1

GENERAL INFORMATION:

APPLICANT: Jacobs, Kenneth

McCoy, John M.

LaVallie, Edward R.

Collins-Racie, Lisa A.

Evans, Cheryl

Merberg, David

Treacy, Maurice

Spaulding, Vikki

TITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES

ENCODING THEM

NUMBER OF SEQUENCES: 219

CORRESPONDENCE ADDRESS:

ADDRESSEE: Genetics Institute, Inc.

STREET: 87 CambridgePark Drive

CITY: Cambridge

STATE: MA

COUNTRY: U.S.A.

ZIP: 02140

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/745,763

FILING DATE: 18-Jun-2000

CLASSIFICATION: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: Sprunger, Suzanne A.

REGISTRATION NUMBER: 41,323

TELECOMMUNICATION INFORMATION:

TELEPHONE: (617) 498-8284

TELEFAX: (617) 876-5851

INFORMATION FOR SEQ ID NO: 38:

SEQUENCE CHARACTERISTICS:

LENGTH: 298 amino acids

TYPE: amino acid

STRANDEDNESS: <Unknown>

TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 38:

US-09-745-763-38

Query Match 80.5%; Score 240; DB 9; Length 298;

Best Local Similarity 100.0%; Pred. No. 8.5e-217;

Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DB 59 SRLEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOG 118
QY 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
DB 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
QY 179 PRIGSOSTNSSTYMTKTGTQLQNTVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDLNIS 238
DB 179 PRIGSOSTNSSTYMTKTGTQLQNTVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDLNIS 238
QY 239 GIIAAVVVALVISVGLGVCAQYRKGYSKETSFOKSNSSSKATTMSNDPKHTKSFII 298
DB 239 GIIAAVVVALVISVGLGVCAQYRKGYSKETSFOKSNSSSKATTMSNDPKHTKSFII 298

RESULT 5

US-09-799-777-30

Sequence 30, Application US/09799777

Patent No. US20020091244A1

GENERAL INFORMATION:

APPLICANT: Lal, Preeti

Hillman, Jennifer L.

Corley, Neil C.

Guegler, Karl J.

Baugh, Mariah

Sather, Susan

Shah, Purvi

TITLE OF INVENTION: HUMAN SIGNAL PEPTIDE-CONTAINING PROTEINS

NUMBER OF SEQUENCES: 154

CORRESPONDENCE ADDRESS:

ADDRESSEE: INCYTE PHARMACEUTICALS, INC.

STREET: 3174 PORTER DRIVE

CITY: PALO ALTO

STATE: CALIFORNIA

COUNTRY: USA

ZIP: 94304

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/799,777

FILING DATE: 06-Mar-2001

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/09/002,485

FILING DATE: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: BILLINGS, LUCY J.

REGISTRATION NUMBER: 36,749

REFERENCE/DOCKET NUMBER: PF-0459 US

TELECOMMUNICATION INFORMATION:

; TELEPHONE: (650) 855-0555
; TELEFAX: (650) 845-4166
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 298 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; IMMEDIATE SOURCE:
; LIBRARY: DUDNOT02
; CLONE: 1704050
; SEQUENCE DESCRIPTION: SEQ ID NO: 30 :
US-09-799-777-30

Query Match 80.5%; Score 240; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 8.5e-217; Mismatches 0; Indels 0; Gaps 0;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 59 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
Db 59 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

Qy 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVVLRCDKEGNAPEYTFWPKDGIRLLEN 178
Db 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVVLRCDKEGNAPEYTFWPKDGIRLLEN 178

Qy 179 PRLGQSQTNSSTYTNMTKTGLQFNTVSKLDTGYSCEARNVGVYRRCPCGRMQVDDLNIS 238
Db 179 PRLGQSQTNSSTYTNMTKTGLQFNTVSKLDTGYSCEARNVGVYRRCPCGRMQVDDLNIS 238

Qy 239 GIITAAVVVVALVISVCGLVGYCAQRKGYSKETSFOKSNSSSKATTMSENDFKHTKSFII 298
Db 239 GIITAAVVVVALVISVCGLVGYCAQRKGYSKETSFOKSNSSSKATTMSENDFKHTKSFII 298

RESULT 6
US-10-139-849-2
; Sequence 2, Application US/10139849
; Publication No. US20030079238A1
; GENERAL INFORMATION:
; APPLICANT: Cunningham, Sonia
; TITLE OF INVENTION: A POLYNUCLEOTIDE ENCODING A HUMAN
; JUNCTIONAL ADHESION PROTEIN (JAM 2)
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Rocket, Milnamow & Katz, Ltd.
; STREET: 180 N. Stetson Avenue, 2 Prudential Plaza,
; Suite 4700
; CITY: Chicago
; STATE: IL
; COUNTRY: U.S.A.
; ZIP: 60601
; COMPUTER READABLE FORM:
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/139,849
; FILING DATE: 07-May-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/643,929
; FILING DATE: 23-Aug-2000
; ATTORNEY/AGENT INFORMATION:
; NAME: Katz, Martin L.
; REGISTRATION NUMBER: 25,011
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312-616-5400
; TELEFAX: 312-616-5460
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:

; LENGTH: 298 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-10-139-849-2

Query Match 80.5%; Score 240; DB 15; Length 298;
Best Local Similarity 100.0%; Pred. No. 8.5e-217; Mismatches 0; Indels 0; Gaps 0;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 59 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
Db 59 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

Qy 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVVLRCDKEGNAPEYTFWPKDGIRLLEN 178
Db 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVVLRCDKEGNAPEYTFWPKDGIRLLEN 178

Qy 179 PRLGQSQTNSSTYTNMTKTGLQFNTVSKLDTGYSCEARNVGVYRRCPCGRMQVDDLNIS 238
Db 179 PRLGQSQTNSSTYTNMTKTGLQFNTVSKLDTGYSCEARNVGVYRRCPCGRMQVDDLNIS 238

Qy 239 GIITAAVVVVALVISVCGLVGYCAQRKGYSKETSFOKSNSSSKATTMSENDFKHTKSFII 298
Db 239 GIITAAVVVVALVISVCGLVGYCAQRKGYSKETSFOKSNSSSKATTMSENDFKHTKSFII 298

RESULT 7
US-10-192-791-2
; Sequence 2, Application US/10192791
; Publication No. US20030130166A1
; GENERAL INFORMATION:
; APPLICANT: Texas Biotechnology Corporation
; TITLE OF INVENTION: A Polynucleotide Encoding a Human Junctional Adhesion Protein (J
; FILE REFERENCE: TEX4542P0430
; CURRENT APPLICATION NUMBER: US/10/192,791
; CURRENT FILING DATE: 2003-12-10
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-192-791-2

Query Match 80.5%; Score 240; DB 16; Length 298;
Best Local Similarity 100.0%; Pred. No. 8.5e-217; Mismatches 0; Indels 0; Gaps 0;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 59 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
Db 59 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

Qy 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVVLRCDKEGNAPEYTFWPKDGIRLLEN 178
Db 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVVLRCDKEGNAPEYTFWPKDGIRLLEN 178

Qy 179 PRLGQSQTNSSTYTNMTKTGLQFNTVSKLDTGYSCEARNVGVYRRCPCGRMQVDDLNIS 238
Db 179 PRLGQSQTNSSTYTNMTKTGLQFNTVSKLDTGYSCEARNVGVYRRCPCGRMQVDDLNIS 238

Qy 239 GIITAAVVVVALVISVCGLVGYCAQRKGYSKETSFOKSNSSSKATTMSENDFKHTKSFII 298
Db 239 GIITAAVVVVALVISVCGLVGYCAQRKGYSKETSFOKSNSSSKATTMSENDFKHTKSFII 298

RESULT 8
US-09-909-320-64
; Sequence 64, Application US/09909320
; Patent No. US20020132240A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.

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Query Match 77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels
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; PRIOR APPLICATION NUMBER: PCT/US99/23089
 ;
 ; PRIOR FILING DATE: 1999-10-05
 ;
 ; PRIOR APPLICATION NUMBER: PCT/US99/28214
 ;
 ; PRIOR FILING DATE: 1999-11-29
 ;

; PRIOR APPLICATION NUMBER: PCT/US99/23089
 ; PRIOR FILING DATE: 1999-10-05
 ; PRIOR APPLICATION NUMBER: PCT/US99/28214
 ; PRIOR FILING DATE: 1999-11-29

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; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-909-088B-64

Query Match      77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 59 SRLEWKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
Db 59 SRLEWKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

QY 119 QNLEEDTTLVLVAPVAPVCEVPSSALSGTVVLELRCQDKEGNPAPEYTFWFKDGIRLLEN 178
Db 119 QNLEEDTTLVLVAPVAPVCEVPSSALSGTVVLELRCQDKEGNPAPEYTFWFKDGIRLLEN 178

QY 179 PRLGSTNSSTNTMTKTGTLQFNTVSKLDTGYSCEARNVGYRCPGKRMQVDDLNIS 238
Db 179 PRLGSTNSSTNTMTKTGTLQFNTVSKLDTGYSCEARNVGYRCPGKRMQVDDLNIS 238

QY 239 GIIAAVVVALVSVCGLVGCYVQKRGYFSKETSFOKSNSSSKATTMSEN 288
Db 239 GIIAAVVVALVSVCGLVGCYVQKRGYFSKETSFOKSNSSSKATTMSEN 288

RESULT 10
US-09-905-291A-64
; Sequence 64, Application US/09905291A
; Patent No. US20020160374A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
```

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; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/905,291A
; CURRENT FILING DATE: 2001-07-12
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-905-291A-64
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Query Match      77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 59 SRLEWKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
Db 59 SRLEWKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

QY 119 QNLEEDTTLVLVAPVAPVCEVPSSALSGTVVLELRCQDKEGNPAPEYTFWFKDGIRLLEN 178
Db 119 QNLEEDTTLVLVAPVAPVCEVPSSALSGTVVLELRCQDKEGNPAPEYTFWFKDGIRLLEN 178

QY 179 PRLGSTNSSTNTMTKTGTLQFNTVSKLDTGYSCEARNVGYRCPGKRMQVDDLNIS 238
Db 179 PRLGSTNSSTNTMTKTGTLQFNTVSKLDTGYSCEARNVGYRCPGKRMQVDDLNIS 238

QY 239 GIIAAVVVALVSVCGLVGCYVQKRGYFSKETSFOKSNSSSKATTMSEN 288
Db 239 GIIAAVVVALVSVCGLVGCYVQKRGYFSKETSFOKSNSSSKATTMSEN 288
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RESULT 11
US-09-953-499-9
; Sequence 9, Application US/09953499
; Publication No. US20020182206A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
```

```
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; TITLE OF INVENTION: OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
; FILE REFERENCE: P1216R1 (US)
; CURRENT APPLICATION NUMBER: US/09/953,499
; CURRENT FILING DATE: 2001-09-14
; PRIOR APPLICATION NUMBER: US/09/254,465
; PRIOR FILING DATE: 1999-03-05
; PRIOR APPLICATION NUMBER: PCT/US98/24855
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 9
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-953-499-9

Query Match      77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 59 SRLEWKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
Db 59 SRLEWKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

QY 119 QNLEEDTTLVLVAVAPVCEVPSSALSGTVVELRCQKEGNPAPEYTFWKDGIRLLEN 178
Db 119 QNLEEDTTLVLVAVAPVCEVPSSALSGTVVELRCQKEGNPAPEYTFWKDGIRLLEN 178

QY 179 PRLGSGSTNSSTYMTKTGTLOFNTVSKLDTGCEYSCAARNVGYRRCPCGKRMQVDDLNIS 238
Db 179 PRLGSGSTNSSTYMTKTGTLOFNTVSKLDTGCEYSCAARNVGYRRCPCGKRMQVDDLNIS 238

QY 239 GIIAAVVVALVISVCGLVGYCAQRKGYSKETSFOKSNSSSKATTMSN 288
Db 239 GIIAAVVVALVISVCGLVGYCAQRKGYSKETSFOKSNSSSKATTMSN 288

RESULT 12
US-09-902-853-64
; Sequence 64, Application US/09902853
; Publication No. US20020192659A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James

; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/902,853
; CURRENT FILING DATE: 2001-07-10
; PRIOR APPLICATION NUMBER: US/09/665,350
; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-902-853-64

Query Match      77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 59 SRLEWKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
Db 59 SRLEWKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

QY 119 QNLEEDTTLVLVAVAPVCEVPSSALSGTVVELRCQKEGNPAPEYTFWKDGIRLLEN 178
Db 119 QNLEEDTTLVLVAVAPVCEVPSSALSGTVVELRCQKEGNPAPEYTFWKDGIRLLEN 178

QY 179 PRLGSGSTNSSTYMTKTGTLOFNTVSKLDTGCEYSCAARNVGYRRCPCGKRMQVDDLNIS 238
Db 179 PRLGSGSTNSSTYMTKTGTLOFNTVSKLDTGCEYSCAARNVGYRRCPCGKRMQVDDLNIS 238

QY 239 GIIAAVVVALVISVCGLVGYCAQRKGYSKETSFOKSNSSSKATTMSN 288
Db 239 GIIAAVVVALVISVCGLVGYCAQRKGYSKETSFOKSNSSSKATTMSN 288
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RESULT 13
; US-09-907-824-64
; Sequence 64, Application US/09907824
; Publication No. US20020197671A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnovers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kijavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/907,824
; CURRENT FILING DATE: 2001-07-17
; PRIOR APPLICATION NUMBER: 09/665,350
; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64

; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-907-824-64

Query Match 77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 59 SRLEWKKGRSVSVFVYQOQLQGDGFKNRAEMIDFNIRIKNVTNRSDACKYRCEVSAPSEQ 118
Db 59 SRLEWKKGRSVSVFVYQOQLQGDGFKNRAEMIDFNIRIKNVTNRSDACKYRCEVSAPSEQ 118
QY 119 QNLEEDTVTLEVLVAPVAPVPSCEVPSSALSGTVVVELRCQDKEGNPAPEYTFWKDGIRLLEN 178
Db 119 QNLEEDTVTLEVLVAPVAPVPSCEVPSSALSGTVVVELRCQDKEGNPAPEYTFWKDGIRLLEN 178
QY 179 PRLGSQSTNSSYTNMTKTGTLOFNTVSKLDTGEYSCEARNISVGYRRCPCGKRMQVDDLNIS 238
Db 179 PRLGSQSTNSSYTNMTKTGTLOFNTVSKLDTGEYSCEARNISVGYRRCPCGKRMQVDDLNIS 238
QY 239 GIITAAVVVALVSVGLGVCAQRKGYSFSGKTSFQKSNSSSKATTMSEN 288
Db 239 GIITAAVVVALVSVGLGVCAQRKGYSFSGKTSFQKSNSSSKATTMSEN 288

RESULT 14
US-09-907-841-64
; Sequence 64, Application US/09907841
; Publication No. US20020198366A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnovers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kijavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/907,841
; CURRENT FILING DATE: 2001-11-20
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
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; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-907-841-64

Query Match      77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 59 SRLEWKKLGRSVSFVYYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
Db 59 SRLEWKKLGRSVSFVYYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

QY 119 QNLEEDTTLVLELVAPVSPCEVPSSALSGTVVELRCQDKEGNPAPEYTFWFKDGIRLLEN 178
Db 119 QNLEEDTTLVLELVAPVSPCEVPSSALSGTVVELRCQDKEGNPAPEYTFWFKDGIRLLEN 178

QY 179 PRLGQSQTNSSTYMTKTGTLOFNTVSKLDTGEYSCEARNSVGYRRCPCGRMQVDDLNIS 238
Db 179 PRLGQSQTNSSTYMTKTGTLOFNTVSKLDTGEYSCEARNSVGYRRCPCGRMQVDDLNIS 238

QY 239 GIIAAVVVVVALVISVCGLGVCYQAKRGYFSKTSFQKSNSSSKATTMSN 288
Db 239 GIIAAVVVVVALVISVCGLGVCYQAKRGYFSKTSFQKSNSSSKATTMSN 288
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RESULT 15
US-09-904-011-64
; Sequence 64, Application US/09904011
; Publication No. US2003000330A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Klijavin, Ivar J.
; APPLICANT: Macher, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/904,011
; CURRENT FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: 09/665,350
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; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-904-011-64

Query Match      77.2%; Score 230; DB 11; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 59 SRLEWKKLGRSVSFVYYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
Db 59 SRLEWKKLGRSVSFVYYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

QY 119 QNLEEDTTLVLELVAPVSPCEVPSSALSGTVVELRCQDKEGNPAPEYTFWFKDGIRLLEN 178
Db 119 QNLEEDTTLVLELVAPVSPCEVPSSALSGTVVELRCQDKEGNPAPEYTFWFKDGIRLLEN 178

QY 179 PRLGQSQTNSSTYMTKTGTLOFNTVSKLDTGEYSCEARNSVGYRRCPCGRMQVDDLNIS 238
Db 179 PRLGQSQTNSSTYMTKTGTLOFNTVSKLDTGEYSCEARNSVGYRRCPCGRMQVDDLNIS 238

QY 239 GIIAAVVVVVALVISVCGLGVCYQAKRGYFSKTSFQKSNSSSKATTMSN 288
Db 239 GIIAAVVVVVALVISVCGLGVCYQAKRGYFSKTSFQKSNSSSKATTMSN 288
```

Search completed: December 9, 2003, 17:47:07
Job time : 37.8223 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:33:14 ; Search time 14.5366 Seconds
(without alignments)
1971.458 Million cell updates/sec

Title: US-09-852-797-76

Perfect score: 298

Sequence: 1 MARRSRHRLLLRLVVA.....SSKATTMSSENDPKHTKSFI 298

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 283308 seqs, 96168682 residues

Word size : 30

Total number of hits satisfying chosen parameters: 0

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : PIR_76:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length DB ID	Description
------------	-------	-------------	--------------	-------------

No matches found

Search completed: December 9, 2003, 17:38:31
Job time : 14.5366 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: December 9, 2003, 17:26:43 ; Search time 10.3833 Seconds
(without alignments)
1349.666 Million cell updates/sec

Title: US-09-852-797-76

Perfect score: 298

Sequence: 1 MARRSRHRLLLRLVVA.....SSKATTMSNDKFKTKSFII 298

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 127863 seqs, 47026705 residues

Word size : 30

Total number of hits satisfying chosen parameters: 1

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : SwissProt_41.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Match	Length	DB ID	Description
1	240	80.5	298	1 JAM2_HUMAN	P57087 homo sapien

ALIGNMENTS

RESULT 1

JAM2_HUMAN
ID JAM2_HUMAN STANDARD; PRT; 298 AA.
AC P57087;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Junctional adhesion molecule 2 precursor (Vascular endothelial
DE Junction-associated molecule) (VE-JAM).
GN JAM2 OR VEJAM OR C21ORF43.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Vascular endothelial cells;
RX MEDLINE=20317114; PubMed=10779521;
RA Palmeri D., van Zante A., Huang C.C., Hemmerich S., Rosen S.D.;
FT "Vascular endothelial junction-associated molecule, a novel member of
FT the immunoglobulin superfamily, is localized to intercellular
FT boundaries of endothelial cells.";
RL J. Biol. Chem. 275:19139-19145(2000).
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=Placenta;
RX MEDLINE=20507930; PubMed=10945976;

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FT CARBOHYD 98 98 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 187 187 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 236 236 N-LINKED (GLCNAC. . .) (POTENTIAL).
SQ SEQUENCE 298 AA; 33207 MW; CA78E518E22DCAEE CRC64;

Query Match      80.5%; Score 240; DB 1; Length 298;
Best Local Similarity 100.0%; Pred. No. 9.1e-214; Indels 0; Gaps 0;
Matches 240; Conservative 0; Mismatches 0;

Qy 59 SRLEWKKLGRSVSFVYYQOTLQGDfKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
Db 59 SRLEWKKLGRSVSFVYYQOTLQGDfKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

Qy 119 QNLEEDTVTLVLVAPVPSCVPSSALSGTVVLRCDKEGNDAPETWFKDGIRLLEN 178
Db 119 QNLEEDTVTLVLVAPVPSCVPSSALSGTVVLRCDKEGNDAPETWFKDGIRLLEN 178

Qy 179 PRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNISVGYRRCPGKRMQVDDLNIS 238
Db 179 PRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNISVGYRRCPGKRMQVDDLNIS 238

Qy 239 GIITAAVVVVALVISVCGLGVCYAQRKGYFSKETSFKXSNSSSKATTMSENDFKHTKSFII 298
Db 239 GIITAAVVVVALVISVCGLGVCYAQRKGYFSKETSFKXSNSSSKATTMSENDFKHTKSFII 298
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Search completed: December 9, 2003, 17:36:26
Job time : 11.3833 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:32:33 ; Search time 37.899 Seconds
(without alignments)
2023.071 Million cell updates/sec

Title: US-09-852-797-76
Perfect score: 298
Sequence: 1 MARRSRHRLLLLLRYLVA.....SSKATTMSNDFKTKSFII 298

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 830525 seqs, 258052604 residues

Word size : 30
Total number of hits satisfying chosen parameters: 0

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

- Database : SPTREMBL 23:*
- 1: sp_archaea:*
 - 2: sp_bacteria:*
 - 3: sp_fungi:*
 - 4: sp_human:*
 - 5: sp_invertebrate:*
 - 6: sp_mammal:*
 - 7: sp_mhc:*
 - 8: sp_organelle:*
 - 9: sp_phage:*
 - 10: sp_plant:*
 - 11: sp_rodent:*
 - 12: sp_virus:*
 - 13: sp_vertebrate:*
 - 14: sp_unclassified:*
 - 15: sp_rvirus:*
 - 16: sp_bacteriap:*
 - 17: sp_archheap:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
------------	-------	-------------	--------	-------	-------------

No matches found.

Search completed: December 9, 2003, 17:38:06
Job time : 53.899 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:13:47 ; Search time 39.4564 Seconds
(without alignments)
1198.803 Million cell updates/sec

Title: US-09-852-797-76

Perfect score: 298

Sequence: 1 MARRSRRLRLRLRLVVA.....SSKATTMSNDPKHTKSFII 298

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 1107863 seqs, 158726573 residues

Word size : 50

Total number of hits satisfying chosen parameters: 40

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : A_Geneseq_19Jun03.*

1: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1980.DAT.*
2: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1981.DAT.*
3: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1982.DAT.*
4: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1983.DAT.*
5: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1984.DAT.*
6: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1985.DAT.*
7: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1986.DAT.*
8: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1987.DAT.*
9: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1988.DAT.*
10: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1989.DAT.*
11: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1990.DAT.*
12: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1991.DAT.*
13: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1992.DAT.*
14: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1993.DAT.*
15: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1994.DAT.*
16: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1995.DAT.*
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18: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1997.DAT.*
19: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1998.DAT.*
20: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1999.DAT.*
21: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA2000.DAT.*
22: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA2001.DAT.*
23: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA2002.DAT.*
24: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA2003.DAT.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	296	99.3	298	19	AAW75220 Human secreted pro.
2	296	99.3	298	23	AAE25983 Human gene 25 enco
3	296	99.3	298	23	AAE27121 Human gene 25 enco
4	296	99.3	298	24	ABR47926 Human secreted pro
5	296	99.3	298	24	ABU64994 Human secreted pro
6	296	99.3	298	24	ABR00172 Human gene 162 enc
7	240	80.5	298	19	AAW85457 Secreted protein e
8	240	80.5	298	22	AAU00512 Human functional a
9	240	80.5	298	23	ABP61801 Human polypeptide

10	240	80.5	298	24	AAO16452 Human functional a
11	230	77.2	312	20	AAV08060 Human PRO245 prote
12	230	77.2	312	20	AAV23324 A33 related antige
13	230	77.2	312	20	AAV13354 Amino acid sequenc
14	230	77.2	312	21	AAV33421 Human PRO245 prote
15	230	77.2	312	21	AAV24401 Human PRO245 prote
16	230	77.2	312	21	AAV70668 Human PRO245 prote
17	230	77.2	312	22	AAU12339 Human PRO245 polyp
18	230	77.2	312	22	AAU00821 Human immune respo
19	230	77.2	312	22	AAV80222 Human PRO245 prote
20	230	77.2	312	22	AAV50904 Human PRO245 prote
21	230	77.2	312	22	AAV53081 Human angiogenesis
22	230	77.2	312	24	ABU69632 Novel human secret
23	230	77.2	312	24	ABU71455 Human PRO polypept
24	230	77.2	312	24	ABU71901 Human secreted/tra
25	230	77.2	312	24	ABU07738 Human A-33 related
26	230	77.2	312	24	ABU66737 Human PRO polypept
27	230	77.2	312	24	ABU67013 Human secreted/tra
28	230	77.2	312	24	ABU67355 Human secreted pro
29	230	77.2	312	24	ABU59818 Novel secreted and
30	230	77.2	312	24	ABU64509 Human secreted/tra
31	230	77.2	312	24	ABU54357 Human polypeptide
32	222	74.5	222	22	AAV41947 Human polypeptide
33	215	72.1	215	22	AAV70500 Angiogenesis prote
34	183	61.4	213	21	AAV27277 Human confluency r
35	166	55.7	303	22	AAV23693 Human EST encoded
36	107	35.9	107	22	AAW40161 Human polypeptide
37	89	29.9	388	22	ABG22341 Novel human diagno
38	73	24.5	140	22	ABG22338 Novel human diagno
39	69	23.2	69	22	ABG22339 Novel human diagno
40	51	17.1	66	22	ABG22340 Novel human diagno

ALIGNMENTS

RESULT 1

AAW75220
ID AAW75220 standard; Protein; 298 AA.
XX
AC AAW75220;
XX
DT 29-JAN-1999 (first entry)
XX
DE Human secreted protein encoded by gene 25 clone HTBEB42.
XX
KW Human; secreted protein; fusion protein; gene therapy; protein therapy;
KW diagnosis; tissue; cancer; tumour; neurodegenerative disorder; leukaemia;
KW developmental abnormality; foetal deficiency; blood; allergy; renal;
KW immune system; asthma; lymphocytic disease; brain; hepatic; lymphoma;
KW inflammation; ischaemic shock; Alzheimer's disease; restenosis; AIDS;
KW cognitive disorder; schizophrenia; prostate; obesity; osteoclast; thymus;
KW osteoporosis; arthritis; testis; lung; thyroiditis; thyroid; digestion;
KW endocrine; metabolism; regulation; malabsorption; gastritis; neoplasm.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Misc-difference 42
FT /label= unknown
FT Misc-difference 58
FT /label= unknown
XX
XX WO9840483-A2.
XX
XX 17-SEP-1998.
XX
XX 12-MAR-1998; 98WO-US04858.
XX
XX 19-DEC-1997; 97US-0068368.
XX
XX 14-MAR-1997; 97US-0040710.
XX
XX 14-MAR-1997; 97US-0040762.
XX
XX 30-MAY-1997; 97US-0048100.

CC including septic shock, sepsis, reperfusion injury, inflammatory bowel
CC disease, Crohn's disease, hematopoietic disorders, respiratory
CC disorders e.g., asthma and allergy, gastrointestinal disorders e.g.,
CC inflammatory bowel disease), cancers e.g., gastric, ovarian, lung,
CC liver, bladder and breast), central nervous system (CNS) disorders e.g.,
CC ischaemic brain injury and/or stroke, neurodegenerative disorders e.g.,
CC Parkinson's disease and Alzheimer's disease, AIDS-related dementia and
CC prion disease, cardiovascular disorders e.g., myocardiitis, arrhythmias,
CC atherosclerosis, inflammatory disorders e.g., hepatitis, gout, trauma,
CC pancreatitis, sarcoidosis and allogeneic transplant rejection, blood-
CC related disorder (thrombosis, arterial thrombosis, atherosclerosis),
CC hyperproliferative disorders, respiratory disorders e.g. rhinitis,
CC sinusitis, tonsillitis, lung cancer, allergic disorders, pneumonitis,
CC renal disorders e.g. acute glomerulonephritis, neurological diseases,
CC liver disorders, endocrine disorders e.g., hyperthyroidism, Addison's
CC disease, hyperpituitarism, infectious diseases and reproductive system
CC disorders e.g. endometriosis. The present sequence represents a human
CC secreted protein of the invention.

XX SQ Sequence 298 AA;

Query Match 99.3%; Score 296; DB 23; Length 298;
Best Local Similarity 100.0%; Pred. No. 2.5e-273;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARRSRHRLLLRLRLVVALGYHKAYGFSAPKDDQVTVAVYQEAAILACKTPKKTVXSR 60
DB 1 MARRSRHRLLLRLRLVVALGYHKAYGFSAPKDDQVTVAVYQEAAILACKTPKKTVXSR 60

QY 61 LEWKILGRSVFVYQOITLQGFQKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQGN 120
DB 61 LEWKILGRSVFVYQOITLQGFQKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQGN 120

QY 121 LEEDVTLEVLVAPVPSCEVPSSALSGTVVELRQDKEGNAPEYTFWPKDGIIRLENPR 180
DB 121 LEEDVTLEVLVAPVPSCEVPSSALSGTVVELRQDKEGNAPEYTFWPKDGIIRLENPR 180

QY 181 LGSQSTNSSTYMTNTGTTLQFNTVSKLDTGEYSCARNVGVYRCPGRMQVDDNLNIGI 240
DB 181 LGSQSTNSSTYMTNTGTTLQFNTVSKLDTGEYSCARNVGVYRCPGRMQVDDNLNIGI 240

QY 241 TAAVVVALVSVGLGVCVYAKRGYFSKETSFKNSSSSKATTMSNDPKHTKSFII 298
DB 241 TAAVVVALVSVGLGVCVYAKRGYFSKETSFKNSSSSKATTMSNDPKHTKSFII 298

RESULT 3
AAE27121
ID AAE27121 standard; Protein; 298 AA.
AC AAE27121;
XX
XX
XX 13-DEC-2002 (first entry)
XX
XX Human gene 25 encoded secreted protein HTEB42, SEQ ID NO:76.
KW Human; secreted protein; autoimmune disease; hyperproliferative disorder;
KW rheumatoid arthritis; neoplasm; cerebrovascular disorder; angiogenesis;
KW cerebral ischaemia; cardiovascular disorder; nervous system disorder;
KW cardiac arrest; Alzheimer's disease; ocular disorder; wound healing;
KW infection; corneal infection; skin aging; food additive; preservative;
KW tissue regeneration; immunosuppressive; antiproliferative; cytostatic;
KW cardiant; vasotropic; cerebroprotective; neurotropic; neuroprotective;
KW antibacterial; virucide; fungicide; ophthalmological; gene therapy;
KW vulnary.

OS Homo sapiens.
XX
XX
FH Key Location/Qualifiers
FT Peptide 1..22
FT FT /label= Signal_peptide
FT Protein 23..298
FT /note= "Mature human secreted protein"

FT Misc-difference 42 /label= Unknown
FT /note= "Encoded by GWG"
FT Misc-difference 58 /label= Unknown
FT /note= "Encoded by TSC"
PN US2002076756-A1.
XX 20-JUN-2002.
XX 11-MAY-2001; 2001US-0853161.
XX 02-FEB-2001; 2001US-265583P.
PA (RUBE/) RUBEN S M.
PA (ROSE/) ROSEN C A.
PA (LIYV/) LI Y.
PA (ZENG/) ZENG Z.
PA (KYAW/) KYAW H.
PA (FYSC/) FISCHER C L.
PA (LIHH/) LI H.
PA (SOPP/) SOPPET D R.
PA (GENT/) GENTZ R L.
PA (WEIV/) WEI Y.
PA (MOOR/) MOORE P A.
PA (YOUN/) YOUNG P E.
PA (GREE/) GREENE J M.
PA (FERR/) FERRIE A M.
XX Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
PI Soppet DR, Gentz RL, Wei Y, Moore PA, Young PE, Greene JM;
PI Ferrie AM;
XX WPI; 2002-574454/61.
DR N-PSDB; AAD44878.
XX
XX New nucleic acid molecules encoding 28 human secreted proteins, useful
XX for diagnosing, preventing, treating or ameliorating medical conditions
XX and as food additives or preservatives -
XX
XX Claim 11; Page 186-187; 209pp; English.
XX
XX AAD44854-AAD44984 represent cDNAs corresponding to 28 human secreted
XX protein genes, and AAE27097-AAE27137 represent the proteins they encode.
XX AAE27138-AAE27164 represent human secreted protein fragments. The genes
XX and their corresponding secreted proteins are useful for preventing,
XX treating or ameliorating medical conditions, e.g., by protein or gene
XX therapy. Secreted protein sequences of the invention are useful for the
XX diagnosis or treatment of disorders such as autoimmune diseases (e.g.
XX rheumatoid arthritis), hyperproliferative disorders (e.g. neoplasms of
XX the breast or liver), cerebrovascular disorders (e.g. cerebral ischaemia,
XX angiogenesis), cardiovascular disorders (e.g. cardiac arrest), nervous
XX system disorders (e.g. Alzheimer's disease), infections caused by fungi,
XX bacteria and viruses and ocular disorders (e.g. corneal infection). The
XX polypeptides can also be used to aid wound healing and epithelial cell
XX proliferation, to prevent skin aging due to sunburn, to maintain organs
XX before transplantation, for supporting cell culture of primary tissues,
XX to regenerate tissues and in chemotaxis. They can also be used as food
XX additives or preservative to increase or decrease storage capabilities,
XX fat content, lipid, protein, carbohydrate, vitamins, minerals, cofactors
XX and other nutritional components. The present sequence represents a human
XX secreted protein of the invention.

SQ Sequence 298 AA;

Query Match 99.3%; Score 296; DB 23; Length 298;
Best Local Similarity 100.0%; Pred. No. 2.5e-273;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARRSRHRLLLRLRLVVALGYHKAYGFSAPKDDQVTVAVYQEAAILACKTPKKTVXSR 60
DB 1 MARRSRHRLLLRLRLVVALGYHKAYGFSAPKDDQVTVAVYQEAAILACKTPKKTVXSR 60

Qy 61 LEWKLGSRVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQON 120
 Db 61 LEWKLGSRVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQON 120
 Qy 121 LEEDTVTLVLVAPVSPCEVPSSALSGTVVLRCDQKEGPNAPETWFKDGIRLLENPR 180
 Db 121 LEEDTVTLVLVAPVSPCEVPSSALSGTVVLRCDQKEGPNAPETWFKDGIRLLENPR 180
 Qy 181 LGSOSTNSSYTMNTKTGTLOFNTVSKLDTGYSCEARNVGVYRCPGKRMQVDDNLISGI 240
 Db 181 LGSOSTNSSYTMNTKTGTLOFNTVSKLDTGYSCEARNVGVYRCPGKRMQVDDNLISGI 240
 Qy 241 IAAVVVVVALVISVCGLVGVCVAQRKGYSKETSFKQSNSSSKATTMSNDPFKHTKSFII 298
 Db 241 IAAVVVVVALVISVCGLVGVCVAQRKGYSKETSFKQSNSSSKATTMSNDPFKHTKSFII 298

RESULT 4

ABR47926
 ID ABR47926 standard; Protein; 298 AA.

XX ABR47926;

DT 12-JUN-2003 (first entry)

XX Human secreted protein, SEQ ID 817.

DE Cardiant; antiarrhythmic; antiarteriosclerotic; vasotropic; cytostatic;
 KW vulnerable; antiinflammatory; nootropic; neuroprotective;
 KW antiparkinsonian; gene therapy; human; cardiovascular disorder.

XX Homo sapiens.

XX WO200295010-A2.

PN 28-NOV-2002.

XX 19-MAR-2002; 2002WO-US09785.

XX 21-MAR-2001; 2001US-277340P.

PR 19-JUL-2001; 2001US-306171P.

PR 13-NOV-2001; 2001US-331287P.

XX (HUMA-) HUMAN GENOME SCI INC.

XX Rosen CA, Ruben SM;

XX WPI; 2003-129429/12.

XX Novel human secreted proteins, useful for detecting, preventing,

PT diagnosing, prognosticating, treating and/or ameliorating

PT cardiovascular disorders such as arrhythmia -

PS Claim 13; SEQ ID 817; 1881pp; English.

XX The present invention relates to novel human secreted proteins
 CC (ABR47633-ABR48145) and their coding sequences (ACC50344-ACC50856). The
 CC proteins and their coding sequences are useful for the preparation of a
 CC diagnostic or pharmaceutical composition for diagnosing or treating a
 CC cardiovascular disorder (e.g., arrhythmia, tachycardia, cardiac arrest,
 CC coronary arteriosclerosis and myocardial ischemia), neural disorders,
 CC immune system disorders, muscular disorders, reproductive disorders,
 CC gastrointestinal disorders, pulmonary disorders, renal disorders,
 CC proliferative disorders and/or cancerous diseases and conditions, for
 CC wound healing and epithelial cell proliferation, to treat inflammation or
 CC infection, for treating thrombosis and arteriosclerosis, for treating or
 CC preventing neural damage which occurs in neuronal disorders or
 CC neurodegenerative conditions such as Alzheimer's disease and Parkinson's
 CC disease, to enhance bone and periodontal regeneration and aid in tissue
 CC transplants or bone grafts, to prevent skin aging or hair loss, to
 CC stimulate growth and differentiation of hematopoietic cells and bone
 CC marrow cells when used in combination with other cytokines, to maintain

CC organs before transplantation or for supporting cell culture of primary
 CC tissues, to increase or decrease differentiation or proliferation of
 CC embryonic stem cells, or to modulate mammalian characteristics or
 CC metabolism.

CC Note: The sequence data for this patent was published in electronic
 CC format and is available from WIPO at
 CC ftp.wipo.int/pub/published_pat_sequences.

XX Sequence 298 AA;

Qy Query Match 99.3%; Score 296; DB 24; Length 298;

Best Local Similarity 100.0%; Pred. No. 2.5e-273;

Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MARRSRHRLLLRLYLVLVVALGYHKKAYGFSAPKDDQVVTAVYQEAIALACKTPKKTVKSR 60

Db 1 MARRSRHRLLLRLYLVLVVALGYHKKAYGFSAPKDDQVVTAVYQEAIALACKTPKKTVKSR 60

Qy 61 LEWKLGSRVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQON 120

Db 61 LEWKLGSRVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQON 120

Qy 121 LEEDTVTLVLVAPVSPCEVPSSALSGTVVLRCDQKEGPNAPETWFKDGIRLLENPR 180

Db 121 LEEDTVTLVLVAPVSPCEVPSSALSGTVVLRCDQKEGPNAPETWFKDGIRLLENPR 180

Qy 181 LGSOSTNSSYTMNTKTGTLOFNTVSKLDTGYSCEARNVGVYRCPGKRMQVDDNLISGI 240

Db 181 LGSOSTNSSYTMNTKTGTLOFNTVSKLDTGYSCEARNVGVYRCPGKRMQVDDNLISGI 240

Qy 241 IAAVVVVVALVISVCGLVGVCVAQRKGYSKETSFKQSNSSSKATTMSNDPFKHTKSFII 298

Db 241 IAAVVVVVALVISVCGLVGVCVAQRKGYSKETSFKQSNSSSKATTMSNDPFKHTKSFII 298

RESULT 5

ABU64994

ID ABU64994 standard; Protein; 298 AA.

XX ABU64994;

XX 15-MAY-2003 (first entry)

XX Human secreted protein gene 25, protein.

XX Secreted protein; immunodeficiency; multiple sclerosis;
 KW severe combined immunodeficiency; autoimmune disorder; cancer;
 KW rheumatoid arthritis; diabetes mellitus; hematopoietic disorder;
 KW inflammatory condition; septic shock; inflammatory bowel disease;
 KW Crohn's disease; respiratory disorder; asthma; allergy; stroke;
 KW gastrointestinal disorder; central nervous system disorder;
 KW ischaemic brain injury; neurodegenerative disorder; Parkinson's
 KW Alzheimer's disease; cardiovascular disorder; atherosclerosis;
 KW blood-related disorder; thrombosis; atherosclerosis; renal disorder;
 KW hyperproliferative disorder; acute glomerulonephritis; Addison's disease;
 KW endocrine disorder; liver disease; reproductive system disorder;
 KW endometriosis; infectious disease; pancreatic disorder; vaccine;
 KW wound repair; angio genesis; lymphatic disorder; hair loss; body weight;
 XX body height; hair colour; human.

OS Homo sapiens.

XX US2002172994-A1.

XX 21-NOV-2002.

XX 11-MAY-2001; 2001US-0852797.

XX 14-MAR-1997; 97US-040710P.

PR 14-MAR-1997; 97US-040762P.

PR 30-MAY-1997; 97US-048100P.

PR 30-MAY-1997; 97US-048189P.

PR 30-MAY-1997; 97US-048357P.

FT	Peptide	1..20	/note= "Possible signal peptide #1"	
FT	Peptide	1..28	/note= "Possible signal peptide #2"	
FT	Protein	21..298	/note= "Possible mature JAM2 #1"	
FT	Protein	29..298	/note= "Possible mature JAM2 #2"	
FT	Domain	237..254	/note= "Transmembrane domain"	
XX	WO200114404-A1.			
XX	01-MAR-2001.			
XX	23-AUG-2000; 2000WO-US23158.			
XX	24-AUG-1999; 99US-0150459.			
XX	(TEXA-) TEXAS BIOTECHNOLOGY CORP.			
XX	Cunningham S, Trinidad Arrate Barros M;			
XX	WPI; 2001-218425/22.			
XX	N-PSDB; AAS00512.			
XX	Novel nucleic acids encoding human junctional adhesion protein useful for producing antibodies that are suitable for therapeutic purposes -			
XX	Claim 4; Page 46-47; 51pp; English.			
XX	The sequence represents a human junctional adhesion molecule 2 (JAM2). The polynucleotide encoding the polypeptide is useful for recombinant production of JAM-2 protein, which in turn is useful for the production of antibodies. The antibodies may be used for probing cellular localisation and/or expression of JAM2 in tissues under normal and disease states, for immunoprecipitating JAM2 protein from cells and/or stroke tissues to determine whether it is modified by glycosylation and phosphorylation, and for determining JAM2 function. The antibodies inhibit interaction of JAM2 with inflammatory cells or influences their paracellular migration, and is therefore useful for alleviating inflammatory diseases such as arthritis, asthma, rheumatoid arthritis, inflammatory bowel disease and Crohn's disease.			
SQ	Sequence	298 AA;		
Query Match 80.5%; Score 240; DB 22; Length 298;				
Best Local Similarity 100.0%; Pred. No. 5.2e-220; Mismatches 0; Indels 0; Gaps 0;				
Matches 240; Conservative 0;				
Qy	59	SRLEWKKLGSRVSFVYYQQTLLQGFKNRAEMIDFNIRIKNVT	SRDAGKYRCEVSAPSEQ	118
Db	59	SRLEWKKLGSRVSFVYYQQTLLQGFKNRAEMIDFNIRIKNVT	SRDAGKYRCEVSAPSEQ	118
Qy	119	QNLSEDTTVLEVLVAPVPCEVSSALSGTVVELRCQDKEGNPAPEYTWPKGIRLLEN	178	
Db	119	QNLSEDTTVLEVLVAPVPCEVSSALSGTVVELRCQDKEGNPAPEYTWPKGIRLLEN	178	
Qy	179	PRLGQSQTNSSTYTWNTKGTGLQFNVT	SKLDGTGEYSCEARNVSVYRRCQKRWQDDNLNIS	238
Db	179	PRLGQSQTNSSTYTWNTKGTGLQFNVT	SKLDGTGEYSCEARNVSVYRRCQKRWQDDNLNIS	238
Qy	239	GIIAAVVVALVISVCGLGVCYAQRKGYSKETSFKQSNSSSKATTMSENDFKHTKSFII	298	
Db	239	GIIAAVVVALVISVCGLGVCYAQRKGYSKETSFKQSNSSSKATTMSENDFKHTKSFII	298	
RESULT 9				
ID	ABP61801			
XX	ABP61801 standard; Protein; 298 AA.			
XX	AC			
XX	ABP61801;			

CC diabetes mellitus, myasthenia gravis, allergic reactions and conditions,
 CC such as asthma or other respiratory problems. (II) is useful to express
 CC recombinant protein, as markers for tissues in which the corresponding
 CC protein is preferentially expressed and in gene therapy. The present
 CC sequence is that of a polypeptide of the invention.

XX
 XX
 SQ Sequence 298 AA;
 Query Match 80.5%; Score 240; DB 23; Length 298;
 Best Local Similarity 100.0%; Pred. No. 5.2e-220;
 Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 59 SRLEWKKLGRSVSFVYQQTLDGDFKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSOG 118
 DB 59 SRLEWKKLGRSVSFVYQQTLDGDFKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSOG 118
 QY 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVVELRCQDKEGNAPEYTFWFKDGIRLLEN 178
 DB 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVVELRCQDKEGNAPEYTFWFKDGIRLLEN 178
 QY 179 PRLGSQSTNSSTYNTMTKTGLQFNVTGKLTGEYSCEARNVSVGYRRCPCGKRMQVDDNLIS 238
 DB 179 PRLGSQSTNSSTYNTMTKTGLQFNVTGKLTGEYSCEARNVSVGYRRCPCGKRMQVDDNLIS 238
 QY 239 GIIAAVVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSFII 298
 DB 239 GIIAAVVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSFII 298

RESULT 10

AAO16452

ID AAO16452 standard; protein; 298 AA.

XX AAO16452;

XX 17-APR-2003 (first entry)

XX Human junctional adhesion molecule 2 (huJAM2).

XX Human; gene therapy; extracellular region; junctional adhesion molecules;
 huJAM; immune system disorder; immune deficiency; autoimmune disorder;
 inflammatory disorder; cancer; wound healing; cardiovascular disease;
 full-length membrane-bound huJAM protein.

XX Homo sapiens.

XX Key Location/Qualifiers

XX Peptide 1..28

XX Domain /label= Signal_peptide

XX /note= "Extracellular domain; Specifically claimed

XX region"

XX Protein 29..298

XX /note= "Mature huJAM2"

XX WO2003008541-A2.

XX 30-JAN-2003.

XX 05-JUL-2002; 2002WO-US19800.

XX 16-JUL-2001; 2001US-305752P.

XX 05-FEB-2002; 2002US-354345P.

XX (ELIL) LILLY & CO ELI.

XX Heuer JG, Smith RC, Su EW;

XX WPI; 2003-221848/21.

XX N-PSDB; AAL51599.

XX New extracellular human junctional adhesion molecule (huJAM)

XX polypeptide, useful for treating an immune system disorder such as an

PT immune deficiency or an inflammatory disorder, cancer, wound healing,
 PT or a cardiovascular disease -

XX Disclosure, Fig 1; 131pp; English.

XX The invention comprises the DNA and protein sequences of the

CC extracellular region of human junctional adhesion molecules (huJAM). The
 CC extracellular huJAM DNA and protein sequences are useful in the treatment
 CC of: immune system disorders (e.g. immune deficiency); autoimmune
 CC disorders; inflammatory disorders; cancer; wound healing; or a
 CC cardiovascular disease. The present amino acid sequence represents the
 CC full-length membrane-bound huJAM2 protein.

XX Sequence 298 AA;

Query Match 80.5%; Score 240; DB 24; Length 298;

Best Local Similarity 100.0%; Pred. No. 5.2e-220;

Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 59 SRLEWKKLGRSVSFVYQQTLDGDFKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSOG 118

DB 59 SRLEWKKLGRSVSFVYQQTLDGDFKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSOG 118

QY 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVVELRCQDKEGNAPEYTFWFKDGIRLLEN 178

DB 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVVELRCQDKEGNAPEYTFWFKDGIRLLEN 178

QY 179 PRLGSQSTNSSTYNTMTKTGLQFNVTGKLTGEYSCEARNVSVGYRRCPCGKRMQVDDNLIS 238

DB 179 PRLGSQSTNSSTYNTMTKTGLQFNVTGKLTGEYSCEARNVSVGYRRCPCGKRMQVDDNLIS 238

QY 239 GIIAAVVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSFII 298

DB 239 GIIAAVVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSFII 298

RESULT 11

AAO8060

ID AAY08060 standard; Protein; 312 AA.

XX AAY08060;

XX 11-SEP-2000 (first entry)

XX Human PRO245 protein.

XX Inflammatory cell infiltration; immune response; T cell proliferation;
 anti-inflammatory; anti-autoimmune; anti-diabetic; spondyloarthritis;
 T cell-mediated disease; spondyloarthritis; sclerosis; renal disease;
 inflammatory myopathy; hemolytic anemia; thrombocytopenia; thyroiditis;
 diabetes mellitus; demyelinating polyneuropathy; Guillain-Barre syndrome;
 multiple sclerosis; polynuropathy; hepatitis; cirrhosis; enteropathy;
 sclerosing cholangitis; inflammatory bowel disease; Whipple's disease;
 skin disease; dermatitis; psoriasis; asthma; allergic rhinitis; tumor;
 food hypersensitivity; urticaria; eosinophilic pneumonia; transplant;
 idiopathic pulmonary fibrosis; graft rejection; PRO245; human.

XX Homo sapiens.

XX WO9914241-A2.

XX 25-MAR-1999.

XX 17-SEP-1998; 98WO-US19437.

XX 17-SEP-1997; 97US-0059119.

XX 18-SEP-1997; 97US-0059263.

XX 28-OCT-1997; 97US-0063550.

XX 12-NOV-1997; 97US-0065186.

XX 21-NOV-1997; 97US-0066364.

XX 04-JUN-1998; 98US-0088026.

(GETH) GENENTECH INC.

Fong S, Goddard A, Gurney AL, Tumas D, Wood WI;

WPI; 1999-229499/19.

N-PSDB; AAX37664.

Composition containing novel polypeptide PRO245, its agonist or antagonist -

Example 1; Fig 2; 177pp; English.

This invention describes a novel composition containing (apart from a carrier or excipient), a novel PRO245 polypeptide (I), its agonist or antagonist, or their fragments, for modulating: (i) infiltration of inflammatory cells into tissue; (ii) an immune response; or (iii) T cell proliferation. The composition increases or decreases any of the effects (i)-(iii). The products of the invention have anti-inflammatory, anti-autoimmune and anti-diabetic activity. (I), and its (ant)agonists and their fragments, are used to treat immune-related diseases, particularly T cell-mediated diseases. The diseases treated include systemic lupus erythematosus, rheumatoid arthritis, juvenile chronic arthritis, spondyloarthropathies, systemic sclerosis (scleroderma), idiopathic inflammatory myopathies (dermatomyositis, polymyositis), Sjogren's syndrome, systemic vasculitis, sarcoidosis, autoimmune hemolytic anemia (immune pancytopenia, paroxysmal nocturnal hemoglobinuria), autoimmune thrombocytopenia (idiopathic thrombocytopenic purpura immune-mediated thrombocytopenia), thyroiditis (Grave's disease, Hashimoto's thyroiditis, juvenile lymphocytic thyroiditis, atrophic thyroiditis), diabetes mellitus, immune-mediated renal disease (glomerulonephritis, tubulointerstitial nephritis), multiple sclerosis, idiopathic demyelinating polyneuropathy, Guillain-Barre syndrome, chronic inflammatory demyelinating polyneuropathy, infectious hepatitis (hepatitis A, B, C, D, E and other non-hepatotropic viruses), autoimmune chronic active hepatitis, primary biliary cirrhosis, granulomatous hepatitis, and sclerosing cholangitis, inflammatory bowel disease (ulcerative colitis; Crohn's disease), gluten-sensitive enteropathy, and Whipple's disease. Autoimmune or immune-mediated skin diseases including bullous skin diseases, erythema multiforme, contact dermatitis, psoriasis, asthma, allergic rhinitis, atopic dermatitis, food hypersensitivity, urticaria, eosinophilic pneumonia, idiopathic pulmonary fibrosis, hypersensitivity pneumonitis, and transplantation associated diseases (graft rejection, and graft-versus-host-disease). (I), its (ant)agonists or fragment can also be used as an adjuvant in treatment of tumors. Antibodies against (I) can also be used for diagnosing such diseases. This sequence represents the human PRO245 protein described in the invention.

Query Match 77.2%; Score 230; DB 20; Length 312; Best Local Similarity 100.0%; Pred. No. 1.8e-210; Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

59 SRLWKGLGRSVFVYQQTLQGDfKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

59 SRLWKGLGRSVFVYQQTLQGDfKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

119 QNLEEDVTLEVLVAPVPSCVPSALSCTVVVELRCQKGNPAPEYTFWKDGIRLLEN 178

119 QNLEEDVTLEVLVAPVPSCVPSALSCTVVVELRCQKGNPAPEYTFWKDGIRLLEN 178

179 PRIGSQSTNSSTYMTNTKTGTLQFNTVSKLTGBYSCEARNVGVRCRGMQVDDLNIS 238

179 PRIGSQSTNSSTYMTNTKTGTLQFNTVSKLTGBYSCEARNVGVRCRGMQVDDLNIS 238

239 GIIAAVVVALVLSVGLGVCAQRKGYSFKETSFQKSNSSSKATTMSN 288

239 GIIAAVVVALVLSVGLGVCAQRKGYSFKETSFQKSNSSSKATTMSN 288

RESULT 12

AAY23324

ID AAY23324 standard; Protein; 312 AA.

XX AC AAY23324;

XX DT 02-SEP-1999 (first entry)

XX DE A33 related antigen PRO245.

XX KW A33 related antigen; PRO301; PRO362; PRO245; inflammatory disease; tumour.

XX OS Homo sapiens.

XX PN W09527098-A2.

XX PD 03-JUN-1999.

XX PF 20-NOV-1998; 98WO-US24855.

XX PR 17-SEP-1998; 98WO-US19437.

XX PR 21-NOV-1997; 97US-0066364.

XX PR 20-MAR-1998; 98US-0078936.

XX PA (GETH) GENENTECH INC.

XX PI Ashkenazi A, Fong S, Goddard A, Gurney AL, Napier MA; Tumas D, Wood WI;

XX DR WPI; 1999-404743/34.

XX DR N-PSDB; AAX81770.

XX PT Antigens PRO301, PRO362 and PRO245 related to A33

XX PS Example 3; Fig 11; 122pp; English.

XX CC The specification describes A33 related antigens PRO301, PRO362 and PRO245. The methods and compositions of the invention are useful for the treatment and diagnosis of inflammatory disease and tumours in mammals. Such inflammatory diseases include of inflammatory bowel disease, systemic lupus erythematosus, rheumatoid arthritis, juvenile chronic arthritis, spondyloarthropathies, systemic sclerosis, scleroderma, idiopathic inflammatory myopathies, dermatomyositis, polymyositis, Sjogren's syndrome, systemic vasculitis, sarcoidosis, autoimmune hemolytic anemia, immune pancytopenia, paroxysmal nocturnal hemoglobinuria, autoimmune thrombocytopenia, idiopathic thrombocytopenic purpura, Hashimoto's thyroiditis, juvenile lymphocytic thyroiditis, atrophic thyroiditis, diabetes mellitus, immune-mediated renal disease, glomerulonephritis, tubulointerstitial nephritis, multiple sclerosis, idiopathic polyneuropathy, hepatobiliary diseases, infectious hepatitis, A, B, C, D, E, nonhepatotropic viruses, autoimmune chronic active cholangitis, primary biliary cirrhosis, granulomatous hepatitis, sclerosing enteropathy, Whipple's disease, autoimmune or immune-mediated skin diseases allergic diseases of the lung such as eosinophilic pneumonias, idiopathic pulmonary fibrosis and hypersensitivity pneumonitis transplantation associated diseases disease. The present sequence represents PRO245.

XX SQ Sequence 312 AA;

Query Match 77.2%; Score 230; DB 20; Length 312; Best Local Similarity 100.0%; Pred. No. 1.8e-210; Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

59 SRLWKGLGRSVFVYQQTLQGDfKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

59 SRLWKGLGRSVFVYQQTLQGDfKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

119 QNLEEDVTLEVLVAPVPSCVPSALSCTVVVELRCQKGNPAPEYTFWKDGIRLLEN 178

119 QNLEEDVTLEVLVAPVPSCVPSALSCTVVVELRCQKGNPAPEYTFWKDGIRLLEN 178

179 PRIGSQSTNSSTYMTNTKTGTLQFNTVSKLTGBYSCEARNVGVRCRGMQVDDLNIS 238

179 PRIGSQSTNSSTYMTNTKTGTLQFNTVSKLTGBYSCEARNVGVRCRGMQVDDLNIS 238

239 GIIAAVVVALVLSVGLGVCAQRKGYSFKETSFQKSNSSSKATTMSN 288

239 GIIAAVVVALVLSVGLGVCAQRKGYSFKETSFQKSNSSSKATTMSN 288

QY 179 PRLGSGSTNSSVTMTKTGLQNTVSKLDTGEYSCARNVGYRCPGKRMQVDDLNIS 238
DB 179 PRLGSGSTNSSVTMTKTGLQNTVSKLDTGEYSCARNVGYRCPGKRMQVDDLNIS 238
QY 239 GIIAAVVVVALVISVGLGVCYVAQRKGYSKTSFKQNSSSSKATTMSN 288
DB 239 GIIAAVVVVALVISVGLGVCYVAQRKGYSKTSFKQNSSSSKATTMSN 288
RESULT 13
ID AAY13354
AC AAY13354 standard; Protein; 312 AA.
XX AAY13354;
XX 25-JUN-1999 (first entry)
XX Amino acid sequence of protein PRO245.
XX Secreted protein; transmembrane protein; human; enterocolitis;
KW Zollinger-Ellison syndrome; gastrointestinal ulceration;
KW congenital microvillus atrophy; skin disease; cell growth;
KW abnormal keratinocyte differentiation; psoriasis; epithelial cancer;
KW Parkinson's disease; Alzheimer's disease; ALS; neuropathy;
KW fibromodulin; dermal scarring; Usher Syndrome; Atrophia areata;
KW anti-thrombotic; wound healing; tissue repair.
XX Homo sapiens.
XX WO9914328-A2.
XX 25-MAR-1999.
XX 16-SEP-1998; 98WO-US19330.
XX 25-NOV-1997; 97US-006840.
PR 17-SEP-1997; 97US-0059113.
PR 17-SEP-1997; 97US-0059115.
PR 17-SEP-1997; 97US-0059117.
PR 17-SEP-1997; 97US-0059119.
PR 17-SEP-1997; 97US-0059121.
PR 17-SEP-1997; 97US-0059122.
PR 18-SEP-1997; 97US-0059184.
PR 18-SEP-1997; 97US-0059263.
PR 18-SEP-1997; 97US-0059266.
PR 15-OCT-1997; 97US-0062125.
PR 17-OCT-1997; 97US-0062285.
PR 17-OCT-1997; 97US-0062287.
PR 21-OCT-1997; 97US-0063486.
PR 24-OCT-1997; 97US-0062814.
PR 24-OCT-1997; 97US-0062816.
PR 24-OCT-1997; 97US-0063045.
PR 24-OCT-1997; 97US-0063120.
PR 24-OCT-1997; 97US-0063121.
PR 24-OCT-1997; 97US-0063127.
PR 24-OCT-1997; 97US-0063128.
PR 27-OCT-1997; 97US-0063329.
PR 27-OCT-1997; 97US-0063327.
PR 28-OCT-1997; 97US-0063541.
PR 28-OCT-1997; 97US-0063542.
PR 28-OCT-1997; 97US-0063544.
PR 28-OCT-1997; 97US-0063549.
PR 28-OCT-1997; 97US-0063550.
PR 28-OCT-1997; 97US-0063564.
PR 28-OCT-1997; 97US-0063435.
PR 29-OCT-1997; 97US-0063704.
PR 29-OCT-1997; 97US-0063732.
PR 29-OCT-1997; 97US-0063738.
PR 29-OCT-1997; 97US-0063734.
PR 29-OCT-1997; 97US-0064215.
PR 29-OCT-1997; 97US-0063735.
PR 31-OCT-1997; 97US-0063870.

PR 31-OCT-1997; 97US-0064103.
PR 03-NOV-1997; 97US-0064248.
PR 07-NOV-1997; 97US-0064809.
PR 12-NOV-1997; 97US-0065186.
PR 17-NOV-1997; 97US-0065846.
PR 18-NOV-1997; 97US-0065693.
PR 21-NOV-1997; 97US-0066120.
PR 21-NOV-1997; 97US-0066364.
PR 24-NOV-1997; 97US-0066772.
PR 24-NOV-1997; 97US-0066466.
PR 24-NOV-1997; 97US-0066770.
PR 24-NOV-1997; 97US-0066511.
PR 24-NOV-1997; 97US-0066453.
XX (GETH) GENENTECH INC.
XX Chen J, Goddard A, Gurney AL, Pennica D, Wood WI, Yuan J;
XX WPI; 1999-229533/19.
XX N-PSDB; AAX52225.
XX New isolated human genes and polypeptides used in, e.g. treatment of
XX gastrointestinal ulceration
XX Claim 12; Fig 24; 320pp; English.
XX AAY13344-403 represent secreted and transmembrane human proteins.
CC The cDNA sequences are obtained from cDNA libraries, prepared from
CC fetal lung, fetal kidney, fetal brain, fetal liver and fetal retina.
CC The encoded polypeptides have specific uses based on their homology to
CC known polypeptides, e.g. PRO211 and PRO217 can be used for disorders
CC associated with the preservation and maintenance of gastrointestinal
CC mucosa and the repair of acute and chronic mucosal lesions
CC (e.g. enterocolitis, Zollinger-Ellison syndrome, gastrointestinal
CC ulceration and congenital microvillus atrophy), skin diseases associated
CC with abnormal keratinocyte differentiation (e.g. psoriasis, epithelial
CC cancers such as lung squamous cell carcinoma of the vulva and gliomas),
CC potent effects on cell growth and development, diseases related to
CC growth or survival of nerve cells including Parkinson's disease,
CC Alzheimer's disease, ALS, neuropathies or cancer. PRO265 can be used
CC as a target for anti-tumor drugs. PRO533 may be used in the treatment
CC of Usher Syndrome or Atrophia areata. PRO269 can be used as an
CC anti-thrombotic agent; PRO287 polypeptides and portions may have
CC therapeutic applications in wound healing and tissue repair; PRO317 can
CC be used for treating problems of the kidney, uterus, endometrium, blood
CC vessels, or related tissue, e.g. in the heart of genital tract.
XX SQ Sequence 312 AA;
Query Match 77.2%; Score 230; DB 20; Length 312;
Best Local Similarity 100.0%; Pred. No. 1.8e-210;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 59 SRLEWKKLGRSVSFVYVYQOTLQGDGFKNRAEMIDFNIRKNVTRSDAGKYRCEVSAPSEQ 118
DB 59 SRLEWKKLGRSVSFVYVYQOTLQGDGFKNRAEMIDFNIRKNVTRSDAGKYRCEVSAPSEQ 118
QY 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
DB 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
QY 179 PRIGSOSTNSSYTMNTKTGLQNTVSKLDTGEYSCARNVGYRCPGKRMQVDDLNIS 238
DB 179 PRIGSOSTNSSYTMNTKTGLQNTVSKLDTGEYSCARNVGYRCPGKRMQVDDLNIS 238
QY 239 GIIAAVVVVALVISVGLGVCYVAQRKGYSKTSFKQNSSSSKATTMSN 288
DB 239 GIIAAVVVVALVISVGLGVCYVAQRKGYSKTSFKQNSSSSKATTMSN 288
RESULT 14
AAB33421

ID AAB33421 standard; Protein; 312 AA.
XX AAB33421;
AC
XX 29-JAN-2001 (first entry)
DT
XX Human PRO245 protein UNQ219 SEQ ID NO:36.
DE
XX
DE
XX Human; immune related disease; diagnosis; antiinflammatory; cardiant;
KW dermatological; antiarthritic; antirheumatic; immunosuppressive;
KW haemostatic; antithyroid; antidiabetic; nootropic; neuroprotective;
KW antianaemic; hepatotropic; virucide; antipsoriatic; antiallergic;
KW antiasthmatic; systemic lupus erythematosus; rheumatoid arthritis;
KW osteoarthritis; spondyloarthropathy; systemic sclerosis; sarcoidosis;
KW idiopathic inflammatory myopathy; Sjogren's syndrome; thyroiditis;
KW autoimmune vasculitis; autoimmune haemolytic anaemia; diabetes mellitus;
KW autoimmune thrombocytopenia; immune-mediated renal disease;
KW demyelinating disease; hepatobiliary disease; Whipple's disease;
KW inflammatory bowel disease; gluten-sensitive enteropathy;
KW autoimmune disease; immune-mediated skin disease; allergic disease;
KW immunological disease; transplantaton associated disease;
KW graft rejection; graft-versus-host-disease.
XX
OS Homo sapiens.
XX
XX WO200053758-A2.
PN
XX
XX 14-SEP-2000.
PD
XX
XX 02-MAR-2000; 2000WO-US05841.
PF
XX
XX 08-MAR-1999; 99WO-US05028.
PR 10-MAR-1999; 99US-0123618.
PR 12-MAR-1999; 99US-0123957.
PR 23-MAR-1999; 99US-0125775.
PR 12-APR-1999; 99US-0128849.
PR 28-APR-1999; 99WO-US08615.
PR 04-MAY-1999; 99US-0131445.
PR 14-MAY-1999; 99US-0132371.
PR 02-JUN-1999; 99US-0134287.
PR 23-JUN-1999; 99WO-US12252.
PR 20-JUL-1999; 99US-0141037.
PR 26-JUL-1999; 99US-0144758.
PR 28-JUL-1999; 99US-0145698.
PR 01-SEP-1999; 99US-0146222.
PR 08-SEP-1999; 99WO-US20111.
PR 13-SEP-1999; 99WO-US20594.
PR 15-SEP-1999; 99WO-US20944.
PR 29-SEP-1999; 99WO-US21090.
PR 05-OCT-1999; 99WO-US21547.
PR 29-OCT-1999; 99US-0162506.
PR 29-NOV-1999; 99WO-US28214.
PR 30-NOV-1999; 99WO-US28313.
PR 01-DEC-1999; 99WO-US28409.
PR 02-DEC-1999; 99WO-US28634.
PR 02-DEC-1999; 99WO-US28551.
PR 02-DEC-1999; 99WO-US28564.
PR 16-DEC-1999; 99WO-US28565.
PR 20-DEC-1999; 99WO-US30095.
PR 30-DEC-1999; 99WO-US31274.
PR 05-JAN-2000; 2000WO-US00219.
PR 06-JAN-2000; 2000WO-US00277.
PR 11-FEB-2000; 2000WO-US03565.
PR 18-FEB-2000; 2000WO-US04341.
PR 22-FEB-2000; 2000WO-US04342.
PR 22-FEB-2000; 2000WO-US04414.
PA (GETH) GENENTECH INC.
XX

PI Ashkenazi AJ, Baker KP, Goddard A, Gurney AL, Hebert C, Henzel W;
PI Kabakoff RC, Lu Y, Pan J, Pennica D, Shelton DL, Smith V;
XX Stewart TA, Tumas D, Watanabe CK, Wood WI, Yan M;
DR WPI; 2000-572271/53.
DR N-PSDB; AAC58586.
XX
XX
PT Sixty four PRO polypeptides, useful in the diagnosis and treatment of
PT immune related disorders, e.g. systemic lupus erythematosus, rheumatoid
PT arthritis, osteoarthritis, thyroiditis and diabetes mellitus -
XX
XX
PS Claim 33; Fig 16; 309pp; English.
XX
CC The present invention describes sixty four human PRO proteins which can
CC be used in the treatment of immune related diseases. The human PRO
CC proteins, anti-PRO antibodies, agonists and antagonists are useful for
CC treating and diagnosing immune related disorders. The disorders are
CC selected from systemic lupus erythematosus, rheumatoid arthritis,
CC osteoarthritis, juvenile chronic arthritis, spondyloarthropathies,
CC systemic sclerosis, idiopathic inflammatory myopathies, Sjogren's
CC syndrome, systemic vasculitis, sarcoidosis, autoimmune haemolytic
CC anaemia, autoimmune thrombocytopenia, thyroiditis, diabetes mellitus,
CC immune-mediated renal disease, demyelinating diseases of the central
CC and peripheral nervous systems, hepatobiliary diseases, inflammatory
CC bowel disease, gluten-sensitive enteropathy and Whipple's disease,
CC autoimmune or immune-mediated skin diseases, allergic diseases,
CC immunological diseases of the lung, and transplantation associated
CC diseases including graft rejection and graft-versus-host-disease.
CC AAC58397 to AAC58578 represent PCR primers and hybridisation probes used
CC in the isolation of human PRO sequences. AAC58579 to AAC58642 and
CC AAB33414 to AAB33477 represent human PRO polynucleotide and protein
CC sequences given in the exemplification of the present invention.
XX
SQ Sequence 312 AA;
XX
Query Match 77.2%; Score 230; DB 21; Length 312;
Best Local Similarity 100.0%; Pred. No. 1.8e-210;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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DB 59 SRLEWKKLGRSVFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
QY 119 QNLEEDVTLEVLVAPAPVSCVPSALSALSGTVVELRCQDKGNPAPEYTFKDGIRLLEN 178
DB 119 QNLEEDVTLEVLVAPAPVSCVPSALSALSGTVVELRCQDKGNPAPEYTFKDGIRLLEN 178
QY 179 PRIGSOSTNSSYTMNTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNIS 238
DB 179 PRIGSOSTNSSYTMNTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNIS 238
QY 239 GIIAAVVVVALVISVCGLGVCYAQRKGYSKETSFOKSNSSSKATTMSEN 288
DB 239 GIIAAVVVVALVISVCGLGVCYAQRKGYSKETSFOKSNSSSKATTMSEN 288
RESULT 15
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ID AAB24401 standard; Protein; 312 AA.
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XX AAB24401;
AC
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XX
DT 07-NOV-2000 (first entry)
XX
XX Human PRO245 protein sequence SEQ ID NO:67.
XX
XX Human; PRO; promotion; inhibition; angiogenesis; cardiovascularisation;
KW diagnosis; trauma; wound; cancer; atherosclerosis; cardiac hypertrophy;
KW angiogenic; proliferative; cardiant; cardiovascular; antiatherosclerotic;
KW cytostatic; gene therapy; vaccine.
XX
OS Homo sapiens.
XX

QY 239 GIITAAVVVVVALVISVCGLVGYAORKGYFSKETSFOKSNSSSKATTWSEN 288
Db 239 GIITAAVVVVVALVISVCGLVGYAORKGYFSKETSFOKSNSSSKATTWSEN 288

Search completed: December 9, 2003, 17:23:29
Job time : 40.4564 secs

PA WO200032221-A2.
XX 08-JUN-2000.
PF 30-NOV-1999; 99WO-US28313.
XX 01-DEC-1998; 98WO-US25108.
XX 16-DEC-1998; 98US-0112850.
PR 12-JAN-1999; 99US-0115554.
PR 08-MAR-1999; 99WO-US05028.
PR 12-MAR-1999; 99US-0123957.
PR 28-APR-1999; 99US-0131445.
PR 14-MAY-1999; 99US-0134287.
PR 02-JUN-1999; 99WO-US12252.
PR 23-JUN-1999; 99US-0141037.
PR 20-JUL-1999; 99US-0144758.
PR 26-JUL-1999; 99US-0145698.
PR 01-SEP-1999; 99WO-US20111.
PR 08-SEP-1999; 99WO-US20594.
PR 13-SEP-1999; 99WO-US20944.
PR 15-SEP-1999; 99WO-US21090.
PR 15-SEP-1999; 99WO-US21547.
PR 05-OCT-1999; 99WO-US23089.
PR 29-OCT-1999; 99US-0162506.
XX
PA (GETH) GENENTECH INC.
XX
XX Ashkenazi AJ, Baker KP, Ferrara N, Gerber H, Hillan KJ, Goddard A;
PI Godowski PJ, Gurney AL, Klein RD, Kuo SS, Paoni NF, Smith V;
PI Watanabe CK, Williams PM, Wood WI;
XX
DR WPI; 2000-412154/35.
DR N-PSDB; AAA77562.
XX
XX Nucleic acids encoding PRO polypeptides useful for preventing,
PT diagnosing and treating diagnosing a cardiovascular, endothelial or
PT angiogenic disorders in mammals -
XX
XX Claim 72; Fig 28; 315pp; English.
XX
XX The present invention describes nucleic acids encoding PRO polypeptides
CC useful for preventing, diagnosing and treating diagnosing a
CC cardiovascular, endothelial or angiogenic disorder in mammals by
CC modulating cell proliferation, angiogenesis and cardiovascularisation,
CC and for identifying agonists and antagonists of these processes. The
CC nucleic acids and the proteins they encode may be used in the
CC prevention, treatment and diagnosis of diseases associated with
CC inappropriate PRO expression such as cardiovascular, endothelial or
CC angiogenic disorders in mammals (e.g. atherosclerosis, cancers and
CC cardiac hypertrophy). For example, the nucleic acids (NCs) and vectors
CC containing them and the PRO polypeptide may be used to treat disorders
CC associated with decreased PRO expression. AAA77510 to AAA77721 and
CC AAB24388 to AAB24435 represent nucleotide and protein sequences used in
CC the exemplification of the present invention.
XX
XX Sequence 312 AA;
SQ
Query Match 77.2%; Score 230; DB 21; Length 312;
Best Local Similarity 100.0%; Pred. No. 1.8e-210;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 59 SRLEWKKLGRSVFVYQOTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
Db 59 SRLEWKKLGRSVFVYQOTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
QY 119 QNLEEDVTLEVLVAPVPSCEVPSSALSGTVVELRCQEGNPAPETWFKDGIRLLEN 178
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US-09-152-060-76
; Sequence 76, Application US/09152060
; Patent No. 6448230
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003P1.US
; CURRENT APPLICATION NUMBER: US/09/152,060
; CURRENT FILING DATE: 1998-09-11
; EARLIER APPLICATION NUMBER: PCT/US98/04858
; EARLIER FILING DATE: 1998-03-12
; EARLIER APPLICATION NUMBER: 60/040,762
; EARLIER FILING DATE: 1997-03-14
; EARLIER APPLICATION NUMBER: 60/040,710
; EARLIER FILING DATE: 1997-03-14
; EARLIER APPLICATION NUMBER: 60/050,934
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/048,100
; EARLIER FILING DATE: 1997-05-30

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; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 9
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-254-465A-9

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Best Local Similarity 100.0%; Pred.No. 1.7e-212;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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GenCore version 5.1.6
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: December 9, 2003, 17:25:18 ; Search time 27.5157 Seconds
(without alignments)
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Title: US-09-852-797-76

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Gapop 60.0 , Gapext 60.0

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Word Size: 50

Total number of hits satisfying chosen parameters: 489

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Post-processing: Listing first 45 summaries

Database : Published Applications AA: **

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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		Match	%				
1	296	99.3	298	9	US-09-853-161-76	Sequence 76, Appl	
2	296	99.3	298	9	US-09-853-659A-76	Sequence 76, Appl	
3	296	99.3	298	10	US-09-852-797-76	Sequence 76, Appl	
4	240	80.5	298	9	US-09-745-763-38	Sequence 30, Appl	
5	240	80.5	298	9	US-09-795-777-30	Sequence 30, Appl	
6	240	80.5	298	15	US-10-119-849-2	Sequence 2, Appl	
7	240	80.5	298	16	US-10-132-791-2	Sequence 2, Appl	
8	230	77.2	312	10	US-09-909-320-64	Sequence 64, Appl	
9	230	77.2	312	10	US-09-908-088B-64	Sequence 64, Appl	
10	230	77.2	312	10	US-09-905-291A-64	Sequence 9, Appl	
11	230	77.2	312	10	US-09-953-499-9	Sequence 9, Appl	
12	230	77.2	312	10	US-09-902-853-64	Sequence 64, Appl	
13	230	77.2	312	10	US-09-907-824-64	Sequence 64, Appl	
14	230	77.2	312	10	US-09-907-841-64	Sequence 64, Appl	
15	230	77.2	312	11	US-09-904-011-64	Sequence 64, Appl	

16	230	77.2	312	11	US-09-906-742-64
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18	230	77.2	312	11	US-09-907-613-64
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20	230	77.2	312	11	US-09-907-948-64
21	230	77.2	312	11	US-09-909-204-64
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38	230	77.2	312	11	US-09-903-056-64
39	230	77.2	312	11	US-09-909-064-64
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41	230	77.2	312	11	US-09-905-381-64
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ALIGNMENTS

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RESULT 1
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; Sequence 76, Application US/09853161
; Patent No. US2002076756A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003F3
; CURRENT APPLICATION NUMBER: US/09/853,161
; CURRENT FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/265,583
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 09/152,060
; PRIOR FILING DATE: 1998-09-11
; PRIOR APPLICATION NUMBER: PCT/US98/04858
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/040,762
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/040,710
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/050,934
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,100
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,357
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,189
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/057,765
; PRIOR FILING DATE: 1997-09-05
; PRIOR APPLICATION NUMBER: 60/048,970
; PRIOR FILING DATE: 1997-06-06
; PRIOR APPLICATION NUMBER: 60/068,368
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 118
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76
; LENGTH: 298

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; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76
; LENGTH: 298
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; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-852-797-76

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Db   241 IAAVVVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSFI 298

RESULT 4
US-09-745-763-38
; Sequence 38, Application US/09745763
; Patent No. US20020065394A1
; GENERAL INFORMATION:
; APPLICANT: Jacobs, Kenneth
; McCoy, John M.
; LaVallie, Edward R.
; Collins-Racie, Lisa A.
; Evans, Cheryl
; Merberg, David
; Treacy, Maurice
; Spaulding, Vikki
TITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES
NUMBER OF SEQUENCES: 219
CORRESPONDENCE ADDRESS:
ADDRESSSEE: Genetics Institute, Inc.
STREET: 87 CambridgePark Drive
CITY: Cambridge
STATE: MA
COUNTRY: U.S.A.
ZIP: 02140
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/745,763
FILING DATE: 18-Jun-2000
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Sprunger, Suzanne A.
```

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; TELEPHONE: (650) 855-0555
; TELEFAX: (650) 845-4166
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 298 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; IMMEDIATE SOURCE:
; LIBRARY: DUDNOT02
; CLONE: 1704050
; SEQUENCE DESCRIPTION: SEQ ID NO: 30:
US-09-799-777-30

Query Match      80.5%; Score 240; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 8.5e-217;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 59 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118
Db 59 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118

Qy 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
Db 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTWFKDGIRLLEN 178

Qy 179 PRLSQSTNSSTYTWNTKTGTLOFNTVSKLDTGYSCEARNVGVYRRCPCGKRMQVDDNLIS 238
Db 179 PRLSQSTNSSTYTWNTKTGTLOFNTVSKLDTGYSCEARNVGVYRRCPCGKRMQVDDNLIS 238

Qy 239 GIIAAVVVVALVISVCGLVGYAQRKGYSFKTSFQKSNSSSKATTMSSEDFKHTKSFII 298
Db 239 GIIAAVVVVALVISVCGLVGYAQRKGYSFKTSFQKSNSSSKATTMSSEDFKHTKSFII 298

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RESULT 6

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US-10-139-849-2
; Sequence 2, Application US/10139849
; Publication No. US20030079238A1
; GENERAL INFORMATION:
; APPLICANT: Cunningham, Sonia
; Barrios, Maria Pia
; TITLE OF INVENTION: A POLYNUCLEOTIDE ENCODING A HUMAN
; JUNCTIONAL ADHESION PROTEIN (JAM 2)
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Rockey, Milnamow & Katz, Ltd.
; STREET: 180 N. Stetson Avenue, 2 Prudential Plaza,
; Suite 4700
; CITY: Chicago
; STATE: IL
; COUNTRY: U.S.A.
; ZIP: 60601
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/139,849
; FILING DATE: 07-May-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/643,929
; FILING DATE: 23-Aug-2000
; ATTORNEY/AGENT INFORMATION:
; NAME: Katz, Martin L.
; REGISTRATION NUMBER: 25,011
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312-616-5400
; TELEFAX: 312-616-5460
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:

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; LENGTH: 298 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-10-139-849-2

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Query Match      80.5%; Score 240; DB 15; Length 298;
Best Local Similarity 100.0%; Pred. No. 8.5e-217;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 59 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118
Db 59 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118

Qy 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
Db 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTWFKDGIRLLEN 178

Qy 179 PRLSQSTNSSTYTWNTKTGTLOFNTVSKLDTGYSCEARNVGVYRRCPCGKRMQVDDNLIS 238
Db 179 PRLSQSTNSSTYTWNTKTGTLOFNTVSKLDTGYSCEARNVGVYRRCPCGKRMQVDDNLIS 238

Qy 239 GIIAAVVVVALVISVCGLVGYAQRKGYSFKTSFQKSNSSSKATTMSSEDFKHTKSFII 298
Db 239 GIIAAVVVVALVISVCGLVGYAQRKGYSFKTSFQKSNSSSKATTMSSEDFKHTKSFII 298

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RESULT 7

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US-10-192-791-2
; Sequence 2, Application US/10192791
; Publication No. US20030130166A1
; GENERAL INFORMATION:
; APPLICANT: Texas Biotechnology Corporation
; TITLE OF INVENTION: A Polynucleotide Encoding a Human Junctional Adhesion Protein (J
; FILE REFERENCE: TEX4542P0430
; CURRENT APPLICATION NUMBER: US/10/192,791
; CURRENT FILING DATE: 2003-12-10
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-192-791-2

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```

Query Match      80.5%; Score 240; DB 16; Length 298;
Best Local Similarity 100.0%; Pred. No. 8.5e-217;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 59 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118
Db 59 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118

Qy 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
Db 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTWFKDGIRLLEN 178

Qy 179 PRLSQSTNSSTYTWNTKTGTLOFNTVSKLDTGYSCEARNVGVYRRCPCGKRMQVDDNLIS 238
Db 179 PRLSQSTNSSTYTWNTKTGTLOFNTVSKLDTGYSCEARNVGVYRRCPCGKRMQVDDNLIS 238

Qy 239 GIIAAVVVVALVISVCGLVGYAQRKGYSFKTSFQKSNSSSKATTMSSEDFKHTKSFII 298
Db 239 GIIAAVVVVALVISVCGLVGYAQRKGYSFKTSFQKSNSSSKATTMSSEDFKHTKSFII 298

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RESULT 8

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US-09-909-320-64
; Sequence 64, Application US/09909320
; Patent No. US20020132240A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.

```

APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Filvaroff, Ellen
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerber, Hanspeter
APPLICANT: Geritsen, Mary E.
APPLICANT: Goddard, A.
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Gurney, Austin L.
APPLICANT: Hillan, Kenneth, J.
APPLICANT: Kljavin, Ivar J.
APPLICANT: Mather, Jennie P.
APPLICANT: Paoni, Nicholas F.
APPLICANT: Roy, Margaret Ann
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/909,320
CURRENT FILING DATE: 2002-01-04
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: US 60/143,048
PRIOR FILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/145,698
PRIOR FILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR FILING DATE: 1999-07-28
PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR FILING DATE: 1999-09-08
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR FILING DATE: 1999-09-13
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/21547
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/23089
PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: PCT/US99/28214
PRIOR FILING DATE: 1999-11-29
PRIOR APPLICATION NUMBER: PCT/US99/28564
PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/28565
PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/30095
PRIOR FILING DATE: 1999-12-16
PRIOR APPLICATION NUMBER: PCT/US99/30911
PRIOR FILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: PCT/US99/30999
PRIOR FILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: PCT/US00/00219
PRIOR FILING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 423
SEQ ID NO 64
LENGTH: 312
TYPE: PRT
ORGANISM: Homo sapiens
US-09-909-320-64

Query Match 77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2,1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

59 SRLEWKKGRSVFVYVYQOTLQDGFKNRAEMIDFNIRIKNVTRSDACKYRCEVSAPSEQ 118
59 SRLEWKKGRSVFVYVYQOTLQDGFKNRAEMIDFNIRIKNVTRSDA GKYRCEVSAPSEQ 118
119 QNLEEDTVTLEVLVAPVAPSPCEVPSSALSCTGVVVELRCQDKEGNPAPEYTWFKDGI R LLEN 178
119 QNLEEDTVTLEVLVAPVAPSPCEVPSSALSCTGVVVELRCQDKEGNPAPEYTWFKDGI R LLEN 178
179 PRLGSQSTNSSYTMNTKTGTLOFNTVSKLDTGYSCEARNVSGYRRCPGKRMQVDDL NIS 238
179 PRLGSQSTNSSYTMNTKTGTLOFNTVSKLDTGYSCEARNVSGYRRCPGKRMQVDDL NIS 238
239 GIITAAVVVVALVSVCGLGVCYAKRGYFSKETSFKQSSSSSKATTMSEN 288
239 GIITAAVVVVALVSVCGLGVCYAKRGYFSKETSFKQSSSSSKATTMSEN 288

RESULT 9
US-09-909-088B-64
Sequence 64, Application US/09909088B
Patent No. US20020146709A1
GENERAL INFORMATION:
APPLICANT: Genentech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Filvaroff, Ellen
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerber, Hanspeter
APPLICANT: Geritsen, Mary E.
APPLICANT: Goddard, A.
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Gurney, Austin L.
APPLICANT: Hillan, Kenneth, J.
APPLICANT: Kljavin, Ivar J.
APPLICANT: Mather, Jennie P.
APPLICANT: Paoni, Nicholas F.
APPLICANT: Roy, Margaret Ann
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/909,088B
CURRENT FILING DATE: 2001-07-18
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: US 60/143,048
PRIOR FILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/145,698
PRIOR FILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR FILING DATE: 1999-07-28
PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR FILING DATE: 1999-09-08
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR FILING DATE: 1999-09-13
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/21547
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/23089
PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: PCT/US99/28214
PRIOR FILING DATE: 1999-11-29

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; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-909-088B-64

Query Match      77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 59 SRLEWKKLGRSVSFVYQQTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQG 118
Db 59 SRLEWKKLGRSVSFVYQQTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQG 118

Qy 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVELRCODKEGNPAPEYTFWKDGIRLLEN 178
Db 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVELRCODKEGNPAPEYTFWKDGIRLLEN 178

Qy 179 PRGQSSTNSSTYMTNTKTGTLQFNTVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNIS 238
Db 179 PRGQSSTNSSTYMTNTKTGTLQFNTVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNIS 238

Qy 239 GIITAAVVVALVISVCGLVGCYVQAKRGYFSKETSFKQSNSSSKATTMSEN 288
Db 239 GIITAAVVVALVISVCGLVGCYVQAKRGYFSKETSFKQSNSSSKATTMSEN 288
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RESULT 10
US-09-905-291A-64
; Sequence 64, Application US/09905291A
; Patent No. US20020160374A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnovers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Geritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Kijavini, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
```

```

; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/905,291A
; CURRENT FILING DATE: 2001-07-12
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-905-291A-64
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Query Match      77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 59 SRLEWKKLGRSVSFVYQQTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQG 118
Db 59 SRLEWKKLGRSVSFVYQQTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQG 118

Qy 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVELRCODKEGNPAPEYTFWKDGIRLLEN 178
Db 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVELRCODKEGNPAPEYTFWKDGIRLLEN 178

Qy 179 PRGQSSTNSSTYMTNTKTGTLQFNTVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNIS 238
Db 179 PRGQSSTNSSTYMTNTKTGTLQFNTVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNIS 238

Qy 239 GIITAAVVVALVISVCGLVGCYVQAKRGYFSKETSFKQSNSSSKATTMSEN 288
Db 239 GIITAAVVVALVISVCGLVGCYVQAKRGYFSKETSFKQSNSSSKATTMSEN 288
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RESULT 11
US-09-953-499-9
; Sequence 9, Application US/09953499
; Publication No. US20020182206A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
```

APPLICANT: Fong, Sherman
APPLICANT: Goddard, Audrey
APPLICANT: Gurney, Austin L.
APPLICANT: Napier, Mary A.
APPLICANT: Tumas, Daniel
APPLICANT: Wood, William I.
TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
FILE REFERENCE: P1216R1 (US)
CURRENT APPLICATION NUMBER: US/09/953,499
CURRENT FILING DATE: 2001-09-14
PRIOR APPLICATION NUMBER: US/09/254,465
PRIOR FILING DATE: 1999-03-05
PRIOR APPLICATION NUMBER: PCT/US98/24855
PRIOR FILING DATE: 1998-11-20
PRIOR APPLICATION NUMBER: US 60/066,364
PRIOR FILING DATE: 1997-11-21
PRIOR APPLICATION NUMBER: US 60/078,936
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: PCT/US98/19437
PRIOR FILING DATE: 1998-09-17
NUMBER OF SEQ ID NOS: 30
SEQ ID NO 9
LENGTH: 312
TYPE: PRT
ORGANISM: Homo sapiens
US-09-953-499-9

Query Match 77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 59 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118
DB 59 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118
QY 119 QNLEEDTTLVLVAVAPVCEVPSSALSGTVVLCQDKEGNPAPEYTFKDGIRLEN 178
DB 119 QNLEEDTTLVLVAVAPVCEVPSSALSGTVVLCQDKEGNPAPEYTFKDGIRLEN 178
QY 179 PRIGSQSTNSSYTMNTKTGTLQNTVSKLDTGYSCEARNVGYRRCPCGRMQVDLNLIS 238
DB 179 PRIGSQSTNSSYTMNTKTGTLQNTVSKLDTGYSCEARNVGYRRCPCGRMQVDLNLIS 238
QY 239 GIIAAVVVALVISVGLGVCAQRKGYSFKTSFKNSSSSKATTMSN 288
DB 239 GIIAAVVVALVISVGLGVCAQRKGYSFKTSFKNSSSSKATTMSN 288

APPLICANT: Paoni, Nicholas F.
APPLICANT: Roy, Margaret Ann
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
Acids Encoding the Same
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/902,853
CURRENT FILING DATE: 2001-07-10
PRIOR APPLICATION NUMBER: US/09/665,350
PRIOR FILING DATE: 2000-09-18
PRIOR APPLICATION NUMBER: US 60/143,048
PRIOR FILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/145,698
PRIOR FILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR FILING DATE: 1999-07-28
PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR FILING DATE: 1999-09-08
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR FILING DATE: 1999-09-13
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/21547
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/23089
PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: PCT/US99/28214
PRIOR FILING DATE: 1999-11-29
PRIOR APPLICATION NUMBER: PCT/US99/28313
PRIOR FILING DATE: 1999-11-30
PRIOR APPLICATION NUMBER: PCT/US99/28564
PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/28565
PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/30095
PRIOR FILING DATE: 1999-12-16
PRIOR APPLICATION NUMBER: PCT/US99/30911
PRIOR FILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: PCT/US99/30999
PRIOR FILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: PCT/US00/00219
PRIOR FILING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 423
SEQ ID NO 64
LENGTH: 312
TYPE: PRT
ORGANISM: Homo Sapien
US-09-902-853-64

Query Match 77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 59 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118
DB 59 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118
QY 119 QNLEEDTTLVLVAVAPVCEVPSSALSGTVVLCQDKEGNPAPEYTFKDGIRLEN 178
DB 119 QNLEEDTTLVLVAVAPVCEVPSSALSGTVVLCQDKEGNPAPEYTFKDGIRLEN 178
QY 179 PRIGSQSTNSSYTMNTKTGTLQNTVSKLDTGYSCEARNVGYRRCPCGRMQVDLNLIS 238
DB 179 PRIGSQSTNSSYTMNTKTGTLQNTVSKLDTGYSCEARNVGYRRCPCGRMQVDLNLIS 238
QY 239 GIIAAVVVALVISVGLGVCAQRKGYSFKTSFKNSSSSKATTMSN 288
DB 239 GIIAAVVVALVISVGLGVCAQRKGYSFKTSFKNSSSSKATTMSN 288


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RESULT 13
US-09-907-824-64
; Sequence 64, Application US/09907824
; Publication No. US20020197671A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kijavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT FILING DATE: 2001-07-17
; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64

US-09-907-841-64
; Sequence 64, Application US/09907841
; Publication No. US20020198366A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kijavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT FILING DATE: 2001-11-20
; PRIOR FILING DATE: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64

Query Match 77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 59 SRLEWKKLGRSVSFYVYQOQTLOGDFKRAEMIDFNIRIKNTVTRSDAGKYRCEVSAPSEQ 118
DB 59 SRLEWKKLGRSVSFYVYQOQTLOGDFKRAEMIDFNIRIKNTVTRSDAGKYRCEVSAPSEQ 118
QY 119 QNLEEDTTLLEVLVAPVPSCEVPSSALSGTVVELRCODKEGNPAPEYTFWPKDGIIRLLEN 178
DB 119 QNLEEDTTLLEVLVAPVPSCEVPSSALSGTVVELRCODKEGNPAPEYTFWPKDGIIRLLEN 178
QY 179 PRLGSQSTNSSYTWNKTGTLOGFNTVSKLDTGEYSCEARNISVGYRRCPGKMQVDDLNIS 238
DB 179 PRLGSQSTNSSYTWNKTGTLOGFNTVSKLDTGEYSCEARNISVGYRRCPGKMQVDDLNIS 238
QY 239 GIITAAVVVVALVISVCGLGVCYAKQKGYFSKETSFOKSNSSSKATTMSEN 288
DB 239 GIITAAVVVVALVISVCGLGVCYAKQKGYFSKETSFOKSNSSSKATTMSEN 288

RESULT 14
US-09-907-841-64
; Sequence 64, Application US/09907841
; Publication No. US20020198366A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kijavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT FILING DATE: 2001-11-20
; PRIOR FILING DATE: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
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; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-907-841-64

Query Match      77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 59 SRLEWKKLGRSVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEOG 118
Db 59 SRLEWKKLGRSVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEOG 118

QY 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTGVVLRCDKEGNPAPEYTWFKDGIRLLEN 178
Db 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTGVVLRCDKEGNPAPEYTWFKDGIRLLEN 178

QY 179 PRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNVGVYRRCRCPKRMQVDDLNIS 238
Db 179 PRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNVGVYRRCRCPKRMQVDDLNIS 238

QY 239 GIIAAVVVVVALVISVCGLGVCYACQKGYFSKETSFOKSNSSSKATTMSEN 288
Db 239 GIIAAVVVVVALVISVCGLGVCYACQKGYFSKETSFOKSNSSSKATTMSEN 288
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RESULT 15

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US-09-904-011-64
; Sequence 64, Application US/09904011
; Publication No. US20030003530A1
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GENERAL INFORMATION:

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; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Kluver, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/904,011
; CURRENT FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: 09/665,350
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; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-904-011-64

Query Match      77.2%; Score 230; DB 11; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 59 SRLEWKKLGRSVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEOG 118
Db 59 SRLEWKKLGRSVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEOG 118

QY 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTGVVLRCDKEGNPAPEYTWFKDGIRLLEN 178
Db 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTGVVLRCDKEGNPAPEYTWFKDGIRLLEN 178

QY 179 PRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNVGVYRRCRCPKRMQVDDLNIS 238
Db 179 PRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNVGVYRRCRCPKRMQVDDLNIS 238

QY 239 GIIAAVVVVVALVISVCGLGVCYACQKGYFSKETSFOKSNSSSKATTMSEN 288
Db 239 GIIAAVVVVVALVISVCGLGVCYACQKGYFSKETSFOKSNSSSKATTMSEN 288
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Search completed: December 9, 2003, 17:34:15
Job time : 28.5157 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:21:03 ; Search time 14.5366 Seconds
(without alignments)
1971.458 Million cell updates/sec

Title: US-09-852-797-76
Perfect score: 298
Sequence: 1 MARRSRHRLLLLLRYLWA.....SSKATTWSENFKHTKSFII 298

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 283308 seqs, 96168682 residues

Word size : 50

Total number of hits satisfying chosen parameters: 0

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : PIR_76.*
1: pir1.*
2: pir2.*
3: pir3.*
4: pir4.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description

No matches found					

Search completed: December 9, 2003, 17:25:56
Job time : 14.5366 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:14:27 ; Search time 10.3833 Seconds
(without alignment)
1349.666 Million cell updates/sec

Title: US-09-852-797-76
Perfect score: 298
Sequence: 1 MARSRRHLLLLRLVVA.....SSKATTMSNDFKTKSFII 298

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 127863 seqs, 47026705 residues

Word size : 50

Total number of hits satisfying chosen parameters: 1

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : SwissProt_41.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	240	80.5	298	1	JAM2_HUMAN

ALIGNMENTS

RESULT 1
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ID JAM2_HUMAN STANDARD; PRT; 298 AA.
AC P57087;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 13-SEP-2003 (Rel. 42, Last annotation update)
DE Junctional adhesion molecule 2 precursor (Vascular endothelial
DE junction-associated molecule) (VE-JAM).
GN JAM2 OR VEJAM OR C21ORP43.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Vascular endothelial cells;
RX MEDLINE=20317114; PubMed=10779521;
RA Palmeri D., van Zante A., Huang C.C., Hemmerich S., Rosen S.D.;
RT "Vascular endothelial junction-associated molecule, a novel member of
RT the immunoglobulin superfamily, is localized to intercellular
RT boundaries of endothelial cells."
RL J. Biol. Chem. 275:19139-19145(2000).
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=Placenta;
RX MEDLINE=20507930; PubMed=10945976;

RA Cunningham S.A., Arrate M.P., Rodriguez J.M., Bjerkke R.J.,
RA Vanderslice P., Morris A.P., Brock T.A.;
RT "A novel protein with homology to the junctional adhesion molecule:
RT Characterization of leukocyte interactions.";
RL J. Biol. Chem. 275:34750-34756(2000).
RN [3]
RP SEQUENCE FROM N.A.
RC TISSUE=Lung;
RX MEDLINE=22388257; PubMed=12477932;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Udén T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettman M., Madan A., Rodrigues S., Sanchez A.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length
RT human and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
CC -!- FUNCTION: MAY PLAY A ROLE IN THE PROCESSES OF LYMPHOCYTE HOMING TO
CC SECONDARY LYMPHOID ORGANS.
CC -!- SUBCELLULAR LOCATION: Type I membrane protein (Potential).
CC -!- TISSUE SPECIFICITY: PROMINENTLY EXPRESSED ON HIGH ENDOTHELIAL
CC VENULES BUT IS ALSO PRESENT ON THE ENDOTHELIA OF OTHER VESSELS.
CC LOCALIZED TO THE INTERCELLULAR BOUNDARIES OF HIGH ENDOTHELIAL
CC CELLS.
CC -!- SIMILARITY: BELONGS TO THE IMMUNOGLOBULIN SUPERFAMILY.
CC -!- SIMILARITY: Contains 1 immunoglobulin-like V-type domain.
CC -!- SIMILARITY: Contains 1 immunoglobulin-like C2-type domain.
CC -!- DATABASE: NAME=PROW; NOTE=PROW 2:1-3(2001);
CC WWW="http://www.ncbi.nlm.nih.gov/prow/guide/1652492186_g.htm".
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
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CC use by non-profit institutions as long as its content is in no way
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CC or send an email to license@isb-sib.ch).
CC -----
CC EMBL; AF255910; AAF81223.1; -;
CC EMBL; AY016009; AAG49022.1; -;
CC EMBL; BC017779; AAH17779.1; -;
CC Genew; HGNC:14686; JMW2.
CC MIM; 606870; -;
CC GO; GO:0005887; C:integral to plasma membrane; NAS.
CC GO; GO:0016337; P:cell-cell adhesion; NAS.
CC InterPro; IPR007110; Ig-like.
CC InterPro; IPR003598; Ig_c2.
CC InterPro; IPR003006; Ig_MHC.
CC Pfam; PF00047; Ig; 2.
CC SMART; SM00408; IGC2; 1.
CC PROSITE; PS50835; IG_LIKE; 2.
CC Immunoglobulin domain; Glycoprotein; Transmembrane; Signal.
CC SIGNAL 1 20 POTENTIAL.
CC CHAIN 21 298 JUNCTIONAL ADHESION MOLECULE 2.
CC DOMAIN 21 238 EXTRACELLULAR (POTENTIAL).
CC TRANSMEM 239 259 POTENTIAL.
CC DOMAIN 260 298 CYTOPLASMIC (POTENTIAL).
CC DOMAIN 32 127 IG-LIKE V-TYPE.
CC DOMAIN 134 238 IG-LIKE C2-TYPE.
CC DISULFID 50 109 POTENTIAL.
CC DISULFID 155 214 POTENTIAL.

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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:20:17 ; Search time 32.1882 Seconds
(without alignments)
2389.088 Million cell updates/sec

Title: US-09-852-797-76
Perfect score: 298
Sequence: 1 MARRSRHRLLLLLRYLVVA.....SSKATTMSNDPKHTKSFII 298

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 830525 seqs, 258052604 residues

Word size : 50

Total number of hits satisfying chosen parameters: 0

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : SPTREMBL 23.*

- 1: sp_archaea.*
- 2: sp_bacteria.*
- 3: sp_fungi.*
- 4: sp_human.*
- 5: sp_invertebrate.*
- 6: sp_mammal.*
- 7: sp_mhc.*
- 8: sp_organelle.*
- 9: sp_phage.*
- 10: sp_plant.*
- 11: sp_rodent.*
- 12: sp_virus.*
- 13: sp_vertebrate.*
- 14: sp_unclassified.*
- 15: sp_virus.*
- 16: sp_bacteriap.*
- 17: sp_archaeap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Query Score	Match Length	DB ID	Description
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No matches found

Search completed: December 9, 2003, 17:25:15
Job time : 32.1882 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:07:01 ; Search time 36.5436 Seconds
(without alignments)
1198.803 Million cell updates/sec

Title: US-09-852-797-76_COPY_23_298

Perfect score: 1418

Sequence: 1 YHKAYGFSAPKQQQVTVAVX.....SSKATTSENDFKHKSFI 276

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1107863 seqs, 158726573 residues

Total number of hits satisfying chosen parameters: 1107863

Minimum DE seq length: 0

Maximum DE seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : A Geneseq_19Jun03.*

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3: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1982.DAT.*
4: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1983.DAT.*
5: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1984.DAT.*
6: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1985.DAT.*
7: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1986.DAT.*
8: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1987.DAT.*
9: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1988.DAT.*
10: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1989.DAT.*
11: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1990.DAT.*
12: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1991.DAT.*
13: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1992.DAT.*
14: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1993.DAT.*
15: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1994.DAT.*
16: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1995.DAT.*
17: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1996.DAT.*
18: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1997.DAT.*
19: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1998.DAT.*
20: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1999.DAT.*
21: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA2000.DAT.*
22: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA2001.DAT.*
23: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA2002.DAT.*
24: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA2003.DAT.*
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	1415	99.8	298	19	Secreted protein e
2	1415	99.8	298	22	Human functional a
3	1415	99.8	298	23	Human polypeptide
4	1415	99.8	298	24	Human functional a
5	1415	99.7	298	19	Human secreted pro
6	1414	99.7	298	23	Human gene 25 enco
7	1414	99.7	298	23	Human gene 25 enco
8	1414	99.7	298	24	Human secreted pro
9	1414	99.7	298	24	Human secreted pro

10	1414	99.7	298	24	ABR00172	Human gene 162 enc
11	1399.5	98.7	303	22	AAW23693	Human EST encoded
12	1362	96.1	312	20	AAW08080	Human PRO245 prote
13	1362	96.1	312	20	AAW13354	A33 related antige
14	1362	96.1	312	20	AAW13354	Amino acid sequenc
15	1362	96.1	312	21	AAW33421	Human PRO245 prote
16	1362	96.1	312	21	AAW34401	Human PRO245 prote
17	1362	96.1	312	21	AAW70668	Human PRO245 prote
18	1362	96.1	312	22	AAU12339	Human immune respo
19	1362	96.1	312	22	AAU00821	Human PRO245 prote
20	1362	96.1	312	22	AAW80222	Human angiogenesis
21	1362	96.1	312	22	AAW33081	Novel human secret
22	1362	96.1	312	24	ABU69632	Human PRO polypept
23	1362	96.1	312	24	ABU71455	Human secreted/tra
24	1362	96.1	312	24	ABU71901	Human A-33 related
25	1362	96.1	312	24	ABU07738	Human PRO polypept
26	1362	96.1	312	24	ABU66737	Human secreted/tra
27	1362	96.1	312	24	ABU67013	Human secreted pro
28	1362	96.1	312	24	ABU67355	Novel secreted and
29	1362	96.1	312	24	ABU59818	Human secreted/tra
30	1362	96.1	312	24	ABU64509	Human secreted/tra
31	1362	96.1	312	24	ABU54357	Human PRO245 prote
32	1356	95.6	312	22	AAW50904	Human polypeptide
33	1143	80.6	222	22	AAW41947	Novel human diagno
34	1139.5	80.4	388	22	ABG22341	Human confluency r
35	1128	79.5	298	21	AAW27273	Murine confluency
36	1128	79.5	298	21	AAW27275	Angiogenesis prote
37	1106	78.0	215	22	AAW70500	Human confluency r
38	1092	77.0	213	21	AAW27277	Novel human diagno
39	702.5	49.5	140	22	ABG22338	Human polypeptide
40	547	38.6	107	22	AAW40161	Human confluency r
41	486.5	34.3	310	21	AAW27272	Murine confluency
42	486.5	34.3	310	21	AAW27278	Human confluency r
43	477.5	33.7	310	21	AAW27276	Human confluency r
44	477.5	33.7	310	21	AAW33457	Human PRO1868 prot
45	477.5	33.7	310	21	AAW96735	PRO1868, an A33 an

ALIGNMENTS

RESULT 1

AAW85457

ID AAW85457 standard; Protein; 298 AA.

XX AAW85457;

AC AAW85457;

XX 25-FEB-1999 (first entry)

XX Secreted protein encoded by clone ct864_4.

XX Secreted protein; nutritional activity; immune stimulating; vaccine;
XX suppressing activity; haematopoiesis regulating activity;
XX tissue growth activity; activin; inhibin activity; chemotaxis;
XX chemokinetic activity; haemostasis; thrombolytic activity; receptor;
XX ligand; anti-inflammatory; cadherin; tumour invasion suppressor;
XX tumour inhibition; gene therapy.

OS Homo sapiens.

XX WO9842739-A2.

XX 01-OCT-1998.

XX 20-MAR-1998; 98WO-US05653.

XX 19-MAR-1998; 98US-0044466.

XX 21-MAR-1997; 97US-0822167.

XX (GEM) GENETICS INST INC.

XX Agostino MU, Jacobs K, Lavallie ER, McCoy JM, Merberg D;

PI Racie LA, Spaulding V, Treacy M;

XX DR WPI; 1998-609890/51.
 XX DR N-PSDB; AAV82780.
 XX PT New polynucleotides encoding secreted human proteins - derived from
 XX PT human foetal brain, adult brain, foetal kidney, placenta or adult
 XX PT pineal gland cDNA libraries.
 XX PS Claim 17; Page 73-74; 113pp; English.
 XX CC The present sequence represents a secreted protein. The polynucleotide
 CC and secreted protein are predicted to have biological activities which
 CC would make them suitable for treating, preventing or ameliorating medical
 CC conditions in humans and animals, although no supporting data is given.
 CC Suggested activities include nutritional activity, immune stimulating
 CC (e.g. as vaccines) or suppressing activity, haematopoiesis regulating
 CC activity, tissue growth activity, activin/inhibin activity,
 CC chemotactic/chemokinetic activity, haemostatic and thrombolytic activity,
 CC receptor/ligand activity, anti-inflammatory activity, cadherin/tumour
 CC invasion suppressor activity, and tumour inhibition activity (no data is
 CC given in the specification to support these activities). The
 CC polynucleotide is also stated to be useful for gene therapy.
 XX SQ Sequence 298 AA;
 Query Match 99.8%; Score 1415; DB 19; Length 298;
 Best Local Similarity 99.3%; Pred. No. 1.6e-111;
 Matches 274; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1 YHKAYGFSAPKDDQVVAVYQEAAILACKTPKKTVXSRLWKLGSRVSFVYQQTLQGD 60
 DB 23 YHKAYGFSAPKDDQVVAVYQEAAILACKTPKKTVXSRLWKLGSRVSFVYQQTLQGD 82
 QY 61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQNLEEDTTLVLVAPVPSCEVP 120
 DB 83 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQNLEEDTTLVLVAPVPSCEVP 142
 QY 121 SSALSGTVVLELRCDKQEGNPAPEYTFKDGIRLLENPRLGQSQTNSSTNTKTGLQFN 180
 DB 143 SSALSGTVVLELRCDKQEGNPAPEYTFKDGIRLLENPRLGQSQTNSSTNTKTGLQFN 202
 QY 181 TVSKLDTGEYSCEARNVGYRRCPCGRMQVDDNLNIGIIAAVVVVALVISVCGLGVCYQAQ 240
 DB 203 TVSKLDTGEYSCEARNVGYRRCPCGRMQVDDNLNIGIIAAVVVVALVISVCGLGVCYQAQ 262
 QY 241 RKGYSKETSFOKSNSSSKATTMSENDFHKTKSFII 276
 DB 263 RKGYSKETSFOKSNSSSKATTMSENDFHKTKSFII 298
 RESULT 2
 AAU00512
 ID AAU00512 standard; Protein; 298 AA.
 XX AC AAU00512;
 XX DT 09-MAY-2001 (first entry)
 XX DE Human junctional adhesion protein (JAM2).
 XX KW Junctional adhesion protein; JAM2; cellular localisation;
 KW cellular expression; immunoprecipitation; stroke; phosphorylation;
 KW glycosylation; paracellular migration; inflammatory disease;
 KW arthritis; asthma; rheumatoid arthritis; inflammatory bowel disease;
 KW Crohn's disease.
 XX OS Homo sapiens.
 XX FH Key Location/Qualifiers
 FT Peptide 1..20
 FT Peptide /note= "Possible signal peptide #1"
 FT Peptide 1..28
 FT Peptide /note= "Possible signal peptide #2"

FT Protein 21..298
 FT /note= "Possible mature JAM2 #1"
 FT Protein 29..298
 FT /note= "Possible mature JAM2 #2"
 FT Domain 237..254
 FT /note= "Transmembrane domain"
 XX WO200114404-A1.
 XX PD 01-MAR-2001.
 XX PF 23-AUG-2000; 2000WO-US23158.
 XX PR 24-AUG-1999; 99US-0150459.
 XX PA (TEXA-) TEXAS BIOTECHNOLOGY CORP.
 XX PI Cunningham S, Trindad Arrate Barros M;
 XX WPI; 2001-218425/22.
 XX N-PSDB; AAS00512.
 XX PT Novel nucleic acids encoding human junctional adhesion protein useful
 XX for producing antibodies that are suitable for therapeutic purposes -
 XX Claim 4; Page 46-47; 51pp; English.
 XX CC The sequence represents a human junctional adhesion molecule 2 (JAM2).
 CC The polynucleotide encoding the polypeptide is useful for recombinant
 CC production of JAM-2 protein, which in turn is useful for the production
 CC of antibodies. The antibodies may be used for probing cellular
 CC localisation and/or expression of JAM2 in tissues under normal and
 CC disease states, for immunoprecipitating JAM2 protein from cells and/or
 CC stroke tissues to determine whether it is modified by glycosylation and
 CC phosphorylation, and for determining JAM2 function. The antibodies
 CC inhibit interaction of JAM2 with inflammatory cells or influences their
 CC paracellular migration, and is therefore useful for alleviating
 CC inflammatory diseases such as arthritis, asthma, rheumatoid arthritis,
 CC inflammatory bowel disease and Crohn's disease.
 XX SQ Sequence 298 AA;
 Query Match 99.8%; Score 1415; DB 22; Length 298;
 Best Local Similarity 99.3%; Pred. No. 1.6e-111;
 Matches 274; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1 YHKAYGFSAPKDDQVVAVYQEAAILACKTPKKTVXSRLWKLGSRVSFVYQQTLQGD 60
 DB 23 YHKAYGFSAPKDDQVVAVYQEAAILACKTPKKTVXSRLWKLGSRVSFVYQQTLQGD 82
 QY 61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQNLEEDTTLVLVAPVPSCEVP 120
 DB 83 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQNLEEDTTLVLVAPVPSCEVP 142
 QY 121 SSALSGTVVLELRCDKQEGNPAPEYTFKDGIRLLENPRLGQSQTNSSTNTKTGLQFN 180
 DB 143 SSALSGTVVLELRCDKQEGNPAPEYTFKDGIRLLENPRLGQSQTNSSTNTKTGLQFN 202
 QY 181 TVSKLDTGEYSCEARNVGYRRCPCGRMQVDDNLNIGIIAAVVVVALVISVCGLGVCYQAQ 240
 DB 203 TVSKLDTGEYSCEARNVGYRRCPCGRMQVDDNLNIGIIAAVVVVALVISVCGLGVCYQAQ 262
 QY 241 RKGYSKETSFOKSNSSSKATTMSENDFHKTKSFII 276
 DB 263 RKGYSKETSFOKSNSSSKATTMSENDFHKTKSFII 298
 RESULT 3
 ABP61801
 ID ABP61801 standard; Protein; 298 AA.
 XX AC ABP61801;
 XX

DT 04-OCT-2002 (first entry)
XX Human polypeptide SEQ ID NO 155.
XX
XX Human; cytostatic; antirheumatic; antiarthritic; vulnary; analgesic;
KW antiinflammatory; antibacterial; immunosuppressive; antiparkinsonian;
KW neuroprotective; nootropic; osteopathic; haemostatic; vasotropic;
KW antitumor; fungicide; antidiabetic; antiaschmatic; antiallergic;
KW immunostimulant; antiparasitic; secreted protein; transmembrane protein;
KW cytokine; cell proliferation; cell differentiation; autoimmune disease;
KW stem cell; growth factor; nervous system disease; neuropathy;
KW Alzheimer's disease; Parkinson's disease; Huntington's disease;
KW osteoporosis; severe combined immunodeficiency; SCID; infection;
KW multiple sclerosis; rheumatoid arthritis; gene therapy.
XX
OS Homo sapiens.
XX
XX US2002065394-A1.
PN
XX
XX 30-MAY-2002.
PD
XX
XX 22-DEC-2000; 2000US-0745763.
XX
XX 18-MAR-1998; 98US-0040963.
PR
XX (JACO/) JACOBS K.
PA (MCCO/) MCCOY J M.
PA (LAVA/) LAVALLIE E R.
PA (COLL/) COLLINS-RACIE L A.
PA (EVAN/) EVANS C.
PA (MERB/) MERBERG D.
PA (TREA/) TREACY M.
PA (SPAU/) SPAULDING V.
XX
XX Jacobs K, McCoy JM, LaVallie ER, Collins-Racie LA, Evans C;
PI Merberg D, Treacy M, Spaulding V;
XX
XX WPI; 2002-582343/62.
DR N-PSDB; ABQ92017.
XX
XX Novel secreted or transmembrane protein and polynucleotide encoding the
PT protein, useful for diagnosis and treatment of neurological disorders,
PT cancer, autoimmune diseases, bone disorders and lung or liver fibrosis
PT
XX
XX Claim 54; Page 116-117; 284pp; English.
XX
XX The invention relates to human secreted or transmembrane protein (I),
CC their fragments and is encoded by specific complementary deoxyribonucleic
CC acid (cDNA) inserts (II), where the protein is substantially free from
CC other mammalian proteins. (I) are useful for preventing, treating or
CC ameliorating a medical condition, especially immunological treatment or
CC prevention of tumours. (I) exhibits activity relating to angiogenesis,
CC cytokine, cell proliferation, cell differentiation, antiinflammatory,
CC stem cell growth factor activity and activin or inhibin-related
CC activities. (I) can be used to manipulate stem cells in culture to give
CC rise to neuroepithelial cells that can be used to augment or replace
CC cells damaged by illness, autoimmune disease, accidental damage or
CC genetic disorders. (I) induces the proliferation of neural cells and
CC regeneration of nerve and brain tissue and is useful for the treatment of
CC central and peripheral nervous system diseases and neuropathies, such as
CC Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic
CC lateral sclerosis. (I) is involved in chemotactic or chemokinetic
CC activity, regulation of haematopoiesis and is useful for treating myeloid
CC or lymphoid cell disorders, platelet disorders such as thrombocytopaenia
CC and for regeneration of bone, cartilage, tendon, ligament and/or nerve
CC tissue growth and in tissue repair, healing of burns, incisions, ulcers,
CC for treating osteoporosis, osteoarthritis, bone degenerative disorders or
CC periodontal disease. (I) is also useful for gut protection or
CC regeneration and treatment of lung or liver fibrosis, reperfusion injury
CC in various tissues, various immune deficiencies and disorders including
CC severe combined immunodeficiency (SCID), bacterial or fungal infections,
CC autoimmune disorders e.g. multiple sclerosis, rheumatoid arthritis,

CC diabetes mellitus, myaesthesia gravis, allergic reactions and conditions,
CC such as asthma or other respiratory problems. (II) is useful to express
CC recombinant protein, as markers for tissues in which the corresponding
CC protein is preferentially expressed and in gene therapy. The present
CC sequence is that of a polypeptide of the invention.
XX
SQ Sequence 298 AA;
Query Match 99.8%; Score 1415; DB 23; Length 298;
Best Local Similarity 99.3%; Pred. No. 1.6e-111;
Matches 274; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1 YHKAYGFSAPKQOVVTA VYQVQVAILACKTPKKT VXSRLKWKLGSRVSFVYVYQOTLQGD 60
Db 23 YHKAYGFSAPKQOVVTA VYQVQVAILACKTPKKT VXSRLKWKLGSRVSFVYVYQOTLQGD 82
Qy 61 FKRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGNLEEDT VTLVLVAPVPSCEVP 120
Db 83 FKRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGNLEEDT VTLVLVAPVPSCEVP 142
Qy 121 SSALSGTIVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGSSQSTNSSTYTNWTKGTLOFN 180
Db 143 SSALSGTIVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGSSQSTNSSTYTNWTKGTLOFN 202
Qy 181 TVSKLDTGEYSCEARNVGVYRRCPCGKMOYDDNLNIGIIAAVVVVALVISVCGLGVCYAO 240
Db 203 TVSKLDTGEYSCEARNVGVYRRCPCGKMOYDDNLNIGIIAAVVVVALVISVCGLGVCYAO 262
Qy 241 RKGYSKETSFOKSNSSSKATTMSENDFKHTKSFII 276
Db 263 RKGYSKETSFOKSNSSSKATTMSENDFKHTKSFII 298
RESULT 4
AAO16452
ID AAO16452 standard; protein; 298 AA.
XX
AC AAO16452;
XX
DT 17-APR-2003 (first entry)
XX
DE Human junctional adhesion molecule 2 (huJAM2).
XX
KW Human; gene therapy; extracellular region; junctional adhesion molecules;
KW huJAM; immune system disorder; immune deficiency; autoimmune disorder;
KW inflammatory disorder; cancer; wound healing; cardiovascular disease;
KW full-length membrane-bound huJAM protein.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Peptide 1..28 /label= Signal_peptide
FT Domain 29..236 /note= "Extracellular domain; Specifically claimed
FT Protein region"
FT 29..298 /note= "Mature huJAM2"
XX
PN WO2003008541-A2.
XX
XX 30-JAN-2003.
XX
XX 05-JUL-2002; 2002WO-US19800.
XX
XX 16-JUL-2001; 2001US-305752P.
PR 05-FEB-2002; 2002US-354345P.
XX
XX (ELIL) LILLY & CO ELI.
XX
XX Heuer JG, Smith RC, Su EW;
XX WPI; 2003-221848/21.
DR

DR N-PSDB; AAL51599.

XX New extracellular human junctional adhesion molecule (hujam)

PT polypeptide, useful for treating an immune system disorder such as an

PT immune deficiency or an inflammatory disorder, cancer, wound healing,

PT or a cardiovascular disease

XX Disclosure; Fig 1; 131pp; English.

XX The invention comprises the DNA and protein sequences of the

CC extracellular region of human junctional adhesion molecules (hujam). The

CC extracellular hujam DNA and protein sequences are useful in the treatment

CC of: immune system disorders (e.g. immune deficiency); autoimmune

CC disorders; inflammatory disorders; cancer; wound healing; or a

CC cardiovascular disease. The present amino acid sequence represents the

CC full-length membrane-bound hujam2 protein.

XX

SQ Sequence 298 AA;

Query Match 99.8%; Score 1415; DB 24; Length 298;

Best Local Similarity 99.3%; Pred. No. 1.6e-111;

Matches 274; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 YHKAYGFSAPKDDQVVTAAYQEAAILACKTPKKTXXSRLEWKKLGRSVSFVYQQTLOGD 60

Db 23 YHKAYGFSAPKDDQVVTAAYQEAAILACKTPKKTXXSRLEWKKLGRSVSFVYQQTLOGD 82

QY 61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSPSEGGQNLLEEDTTLVLVAPVAPVSCVP 120

Db 83 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSPSEGGQNLLEEDTTLVLVAPVAPVSCVP 142

QY 121 SSALSGTVVELRCQDEKGNPAPEYTFWKGDLRLLENPRLGSGSTNSSTMTKTGLQFN 180

Db 143 SSALSGTVVELRCQDEKGNPAPEYTFWKGDLRLLENPRLGSGSTNSSTMTKTGLQFN 202

QY 181 TVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNSIGIIAAVVVALVISVGLGVCAQ 240

Db 203 TVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNSIGIIAAVVVALVISVGLGVCAQ 262

QY 241 RKGYSKETSFOKNSSSKATMTSENDFKHTKSFII 276

Db 263 RKGYSKETSFOKNSSSKATMTSENDFKHTKSFII 298

RESULT 5

AAW75220 standard; Protein; 298 AA.

ID AAW75220;

AC AAW75220;

XX

DT 29-JAN-1999 (first entry)

DE Human secreted protein encoded by gene 25 clone HTEB42.

XX Human; secreted protein; fusion protein; gene therapy; protein therapy;

KW diagnosis; tissue; cancer; tumour; neurodegenerative disorder; leukaemia;

KW developmental abnormality; foetal deficiency; blood; allergy; renal;

KW immune system; asthma; lymphocytic disease; brain; hepatic; lymphoma;

KW inflammation; ischaemic shock; Alzheimer's disease; restenosis; AIDS;

KW cognitive disorder; schizophrenia; prostate; obesity; osteoclast; thymus;

KW osteoporosis; arthritis; testis; lung; thyroiditis; thyroid; digestion;

KW endocrine; metabolism; regulation; malabsorption; gastritis; neoplasm.

XX

OS Homo sapiens.

XX

XX Key Location/Qualifiers

PH Misc-difference 42 /label= unknown

FT Misc-difference 58 /label= unknown

XX

PN WO9804083-A2.

PD 17-SEP-1998.

XX

PF 12-MAR-1998; 98WO-US04858.

XX

PR 19-DEC-1997; 97US-0068368.

PR 14-MAR-1997; 97US-0040710.

PR 14-MAR-1997; 97US-0040762.

PR 30-MAY-1997; 97US-0048100.

PR 30-MAY-1997; 97US-0048189.

PR 30-MAY-1997; 97US-0048357.

PR 30-MAY-1997; 97US-0050934.

PR 06-JUN-1997; 97US-0048970.

PR 05-SEP-1997; 97US-0057765.

XX

PA (HUMA-) HUMAN GENOME SCI INC.

XX

PI Ferrie AM, Fischer CL, Gentz RL, Greene JM, Kiyaw H;

PI Li H, Li Y, Moore PA, Rosen CA, Ruben SM, Soppet DR;

PI Wei YF, Young PE, Zeng Z;

XX

DR WPI; 1998-520811/44.

DR N-PSDB; AAV34310.

XX

PT Isolated human polynucleotide(s) encoding secretory peptide(s) -

PT used to develop products for the diagnosis and treatment of e.g.

PT inflammation, cancers, CNS disorders or immune system disorders

XX

PS Claim 1; Page 168-169; 201pp; English.

XX

CC This sequence represents a secreted human protein encoded by the gene

CC clone detailed in the descriptor line. The gene can be used to generate

CC fusion proteins by linking to the gene to a human immunoglobulin Fc

CC portion (e.g. AAV34277) for increasing the stability of the fused

CC protein as compared to the human protein only.

CC The invention relates to 28 novel genes and their fragments (nucleic

CC acid sequences: AAV34286-V34325; amino acid sequences AAV75196-W75235)

CC which are useful for preventing, treating or ameliorating medical

CC conditions e.g. by protein or gene therapy. Also, pathological

CC conditions can be diagnosed by determining the amount of the new

CC polypeptides in a sample or by determining the presence of mutations in

CC the new polynucleotides. Specific uses are described for each of the 28

CC polynucleotides, based on which tissues they are most highly expressed in

CC (see AAV34286 for described uses).

XX

SQ Sequence 298 AA;

Query Match 99.7%; Score 1414; DB 19; Length 298;

Best Local Similarity 100.0%; Pred. No. 2e-111;

Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YHKAYGFSAPKDDQVVTAAYQEAAILACKTPKKTXXSRLEWKKLGRSVSFVYQQTLOGD 60

Db 23 YHKAYGFSAPKDDQVVTAAYQEAAILACKTPKKTXXSRLEWKKLGRSVSFVYQQTLOGD 82

QY 61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSPSEGGQNLLEEDTTLVLVAPVAPVSCVP 120

Db 83 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSPSEGGQNLLEEDTTLVLVAPVAPVSCVP 142

QY 121 SSALSGTVVELRCQDEKGNPAPEYTFWKGDLRLLENPRLGSGSTNSSTMTKTGLQFN 180

Db 143 SSALSGTVVELRCQDEKGNPAPEYTFWKGDLRLLENPRLGSGSTNSSTMTKTGLQFN 202

QY 181 TVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNSIGIIAAVVVALVISVGLGVCAQ 240

Db 203 TVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNSIGIIAAVVVALVISVGLGVCAQ 262

QY 241 RKGYSKETSFOKNSSSKATMTSENDFKHTKSFII 276

Db 263 RKGYSKETSFOKNSSSKATMTSENDFKHTKSFII 298

RESULT 6

AAE26983

XX OS Homo sapiens.
XX FH Key Location/Qualifiers
XX FT Peptide 1..22
XX FT /label= Signal_peptide
XX FT Protein 23..298
XX FT /note= "Mature human secreted protein"
XX FT Misc-difference 42
XX FT /label= Unknown
XX FT /note= "Encoded by GWG"
XX FT Misc-difference 58
XX FT /label= Unknown
XX FT /note= "Encoded by TSC"
XX FT US2002076756-A1.
XX PN 20-JUN-2002.
XX PF 11-MAY-2001; 2001US-0853161.
XX PR 02-FEB-2001; 2001US-265583P.
XX PA (RUBE/) RUBEN S M.
XX PA (ROSE/) ROSEN C A.
XX PA (LIYY/) LI Y.
XX PA (ZENG/) ZENG Z.
XX PA (KYAW/) KYAW H.
XX PA (FISC/) FISCHER C L.
XX PA (LIHH/) LI H.
XX PA (SOPP/) SOPPET D R.
XX PA (GENT/) GENTZ R L.
XX PA (WEIY/) WEI Y.
XX PA (MOOR/) MOORE P A.
XX PA (YOUN/) YOUNG P E.
XX PA (GREE/) GREENE J M.
XX PA (FERR/) FERRIE A M.
XX PI Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
XX PI Soppet DR, Gentz RL, Wei Y, Moore PA, Young PE, Greene JM;
XX PI Ferrie AM;
XX WPI: 2002-574454/61.
XX DR N-PSDB; AAD44878.
XX PT New nucleic acid molecules encoding 28 human secreted proteins, useful
XX PT for diagnosing, preventing, treating or ameliorating medical conditions
XX PT and as food additives or preservatives -
XX PS Claim 11; Page 186-187; 209pp; English.
XX CC AAD44854-AAD44984 represent cDNAs corresponding to 28 human secreted
XX CC protein genes, and AAE27097-AAE27137 represent the proteins they encode.
XX CC AAE27138-AAE27164 represent human secreted protein fragments. The genes
XX CC and their corresponding secreted proteins are useful for preventing,
XX CC treating or ameliorating medical conditions, e.g., by protein or gene
XX CC therapy. Secreted protein sequences of the invention are useful for the
XX CC diagnosis or treatment of disorders such as autoimmune diseases (e.g.
XX CC rheumatoid arthritis), hyperproliferative disorders (e.g. neoplasms of
XX CC the breast or liver), cerebrovascular disorders (e.g. cerebral ischaemia,
XX CC angiogenesis), cardiovascular disorders (e.g. cardiac arrest), nervous
XX CC system disorders (e.g. Alzheimer's disease), infections caused by fungi,
XX CC bacteria and viruses and ocular disorders (e.g. corneal infection). The
XX CC polypeptides can also be used to aid wound healing and epithelial cell
XX CC proliferation, to prevent skin aging due to sunburn, to maintain organs
XX CC before transplantation, for supporting cell culture of primary tissues,
XX CC to regenerate tissues and in chemotaxis. They can also be used as food
XX CC additives or preservative to increase or decrease storage capabilities,
XX CC fat content, lipid, protein, carbohydrate, vitamins, minerals, cofactors
XX CC and other nutritional components. The present sequence represents a human
XX CC secreted protein of the invention.
XX SQ Sequence 298 AA;

Query Match 99.7%; Score 1414; DB 23; Length 298;
Best Local Similarity 100.0%; Pred. No. 2e-111;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 YHKAYGFSAPKDOQVVTAVXYQEAII LACKTPKKTVA SRLEWKLGSRVSFVYQOQTLOGD 60
DB 23 YHKAYGFSAPKDOQVVTAVXYQEAII LACKTPKKTVA SRLEWKLGSRVSFVYQOQTLOGD 82
QY 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQONLEEDVTTLVLVAPVPSCVCP 120
DB 83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQONLEEDVTTLVLVAPVPSCVCP 142
QY 121 SSALSGTVVELRCODKEGNPAEYTFKDGIRILENPRIGSQSTNSSTYTNKTGTLOFN 180
DB 143 SSALSGTVVELRCODKEGNPAEYTFKDGIRILENPRIGSQSTNSSTYTNKTGTLOFN 202
QY 181 TVSKLDTGEYSCEARN SVGYRCPGKRMQVDDLNISGIIAAV VVVALVSVCGLGVCYAO 240
DB 203 TVSKLDTGEYSCEARN SVGYRCPGKRMQVDDLNISGIIAAV VVVALVSVCGLGVCYAO 262
QY 241 RKGYFSKETSPFKSNSSSKATTMSSENDFKHTKSFII 276
DB 263 RKGYFSKETSPFKSNSSSKATTMSSENDFKHTKSFII 298
RESULT 8
ABR47926
ID ABR47926 standard; Protein; 298 AA.
AC ABR47926;
XX 12-JUN-2003 (first entry)
DT Human secreted protein, SEQ ID 817.
XX Cardiant; antiarrhythmic; antiarteriosclerotic; vasostatic;
KW vulnary; antiinflammatory; nootropic; neuroprotective;
KW antiparkinsonian; gene therapy; human; cardiovascular disorder.
XX Homo sapiens.
XX WO200295010-A2.
XX 28-NOV-2002.
XX 19-MAR-2002; 2002WO-US09785.
XX 21-MAR-2001; 2001US-277340P.
XX 19-JUL-2001; 2001US-306171P.
XX 13-NOV-2001; 2001US-331287P.
XX (HUMA-) HUMAN GENOME SCI INC.
XX Rosen CA, Ruben SM;
XX WPI; 2003-129429/12.
XX Novel human secreted proteins, useful for detecting, preventing,
XX diagnosing, prognosticating, treating and/or ameliorating
XX cardiovascular disorders such as arrhythmia -
XX Claim 13; SEQ ID 817; 1881pp; English.
XX The present invention relates to novel human secreted proteins
XX (ABR47633-ABR48145) and their coding sequences (ACC50344-ACC50856). The
XX proteins and their coding sequences are useful for the preparation of a
XX diagnostic or pharmaceutical composition for diagnosing or treating a
XX cardiovascular disorder (e.g., arrhythmia, tachycardia, cardiac arrest,
XX coronary arteriosclerosis and myocardial ischaemia), neural disorders,
XX immune system disorders, muscular disorders, reproductive disorders,
XX gastrointestinal disorders, pulmonary disorders, renal disorders,
XX proliferative disorders and/or cancerous diseases and conditions, for

CC wound healing and epithelial cell proliferation, to treat inflammation or
 CC infection, for treating thrombosis and arteriosclerosis, for treating or
 CC preventing neural damage which occurs in neuronal disorders or
 CC neurodegenerative conditions such as Alzheimer's disease and Parkinson's
 CC disease, to enhance bone and periodontal regeneration and aid in tissue
 CC transplants or bone grafts, to prevent skin aging or hair loss, to
 CC stimulate growth and differentiation of haematopoietic cells and bone
 CC marrow cells when used in combination with other cytokines, to maintain
 CC organs before transplantation or for supporting cell culture of primary
 CC tissues, to increase or decrease differentiation or proliferation of
 CC embryonic stem cells, or to modulate mammalian characteristics or
 CC metabolism.
 CC Note: The sequence data for this patent was published in electronic
 CC format and is available from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences.
 XX

SQ Sequence 298 AA;

Query Match 99.7%; Score 1414; DB 24; Length 298;
 Best Local Similarity 100.0%; Pred. No. 2e-111;
 Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 YKAYGFSAPKQOVVTAIXYQBAIIACKTPKKTIVXSRLKGLGRSVFVYQOTLQGD 60
 DB 23 YKAYGFSAPKQOVVTAIXYQBAIIACKTPKKTIVXSRLKGLGRSVFVYQOTLQGD 82
 QY 61 FKNRAEMIDFNIRIKNVTSDACKYRCEVSAPEQGNLEEDVTLEVLVAPVPSCEVP 120
 DB 83 FKNRAEMIDFNIRIKNVTSDACKYRCEVSAPEQGNLEEDVTLEVLVAPVPSCEVP 142
 QY 121 SSALSGTVVELRCQDEKGNPAPEYTFKDGIRLLENPRLGQSTNSGYTMTKTGLQFN 180
 DB 143 SSALSGTVVELRCQDEKGNPAPEYTFKDGIRLLENPRLGQSTNSGYTMTKTGLQFN 202
 QY 181 TVSKLDTGYSCEARNSVGRPCGKRMQVDDINISGIITAAVVALVISVCGLGVCYQAQ 240
 DB 203 TVSKLDTGYSCEARNSVGRPCGKRMQVDDINISGIITAAVVALVISVCGLGVCYQAQ 262
 QY 241 RKGYFSKETSFKNSNSSKATTMSENDFKHTKSFII 276
 DB 263 RKGYFSKETSFKNSNSSKATTMSENDFKHTKSFII 298

RESULT 9

ABU64994
 ID ABU64994 standard; Protein; 298 AA.
 AC ABU64994;
 XX
 XX
 DT 15-MAY-2003 (first entry)
 XX
 DE Human secreted protein gene 25, protein.
 KW Secreted protein; immunodeficiency; multiple sclerosis;
 KW severe combined immunodeficiency; autoimmune disorder; cancer;
 KW rheumatoid arthritis; diabetes mellitus; haematopoietic disorder;
 KW inflammatory condition; septic shock; inflammatory bowel disease;
 KW Crohn's disease; respiratory disorder; asthma; allergy; stroke;
 KW gastrointestinal disorder; central nervous system disorder;
 KW ischaemic brain injury; neurodegenerative disorder; Parkinson's disease;
 KW Alzheimer's disease; cardiovascular disorder; atherosclerosis;
 KW blood-related disorder; thrombosis; atherosclerosis; renal disorder;
 KW hyperproliferative disorder; acute glomerulonephritis; Addison's disease;
 KW endocrine disorder; liver disease; reproductive system disorder;
 KW endometriosis; infectious disease; pancreatic disorder; vaccine;
 KW wound repair; angiogenesis; lymphatic disorder; hair loss; body weight;
 KW body height; hair colour; human.
 XX Homo sapiens.
 OS
 XX
 XX US2002172994-A1.
 XX
 XX
 PD 21-NOV-2002.

XX 11-MAY-2001; 2001US-0852797.
 XX
 PR 14-MAR-1997; 97US-040710P.
 PR 14-MAR-1997; 97US-040762P.
 PR 30-MAY-1997; 97US-048100P.
 PR 30-MAY-1997; 97US-048189P.
 PR 30-MAY-1997; 97US-048357P.
 PR 30-MAY-1997; 97US-050934P.
 PR 06-JUN-1997; 97US-048970P.
 PR 05-SEP-1997; 97US-057765P.
 PR 19-DEC-1997; 97US-068368P.
 PR 02-FEB-2001; 2001US-265583P.
 PR 12-MAR-1998; 98WO-US04858.
 PR 11-SEP-1998; 98US-015260.
 XX
 PA (RUBE/) RUBEN S M.
 PA (ROSE/) ROSEN C A.
 PA (LIYV/) LI Y.
 PA (ZENG/) ZENG Z.
 PA (KYAW/) KYAW H.
 PA (FISC/) FISCHER C L.
 PA (LIHH/) LI H.
 PA (SOPP/) SOPPET D R.
 PA (GENT/) GENTZ R L.
 PA (WEIY/) WEI Y.
 PA (MOOR/) MOORE P A.
 PA (YOUN/) YOUNG P E.
 PA (GREE/) GREENE J M.
 PA (FERR/) FERRIE A M.
 XX
 Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
 Soppet DR, Gentz RL, Wei Y, Moore PA, Young PE, Greene JM;
 Ferrie AM;
 WPI; 2003-310989/30.
 DR N-PSDB; ABX96990.

XX New human secreted polypeptides and polynucleotides for diagnosing,
 PT prognosing, preventing and treating immune, hyperproliferative, liver,
 PT kidney, reproductive disorders and for identifying modulators of
 PT therapeutic use -

Claim 11; Page 186; 209pp; English.

CC The invention relates to an isolated polypeptide comprising an amino acid
 CC sequence at least 95% identical to sequence of 28 human secreted
 CC proteins, their fragment, polypeptide domain, epitope, secreted form,
 CC variant, allelic variant, or species homologue, or the encoded sequence
 CC included in ATCC 97921 and 97922. Also included are the encoding
 CC nucleic acids, recombinant vectors, host cells, antibodies, and genes.
 CC The proteins and nucleic acids are useful for diagnosing, preventing,
 CC treating, prognosing or ameliorating a medical condition e.g.
 CC immunodeficiencies (e.g. X-linked agammaglobulinaemia, B cell
 CC disorders (e.g. systemic erythematous, rheumatoid arthritis, multiple
 CC sclerosis, autoimmune thyroiditis, autoimmune haemolytic anaemia,
 CC Goodpasture's syndrome, Grave's disease, diabetes mellitus, dermatitis),
 CC haematopoietic disorders, inflammatory conditions (e.g. septic shock,
 CC sepsis, reperfusion injury, inflammatory bowel disease, Crohn's disease),
 CC respiratory disorders (e.g. asthma and allergy), gastrointestinal
 CC disorders (e.g. gastric, ovarian, lung, bladder, liver and
 CC breast), central nervous system (CNS) disorders (e.g. ischaemic brain
 CC injury and/or stroke, traumatic brain injury), neurodegenerative
 CC disorders (e.g. Parkinson's disease and Alzheimer's disease, AIDS-related
 CC dementia, and prion disease), cardiovascular disorders (e.g.
 CC atherosclerosis, myocarditis, cardiovascular diseases, and cardiopulmonary
 CC bypass complications), inflammation (e.g. hepatitis, gout, trauma,
 CC pancreatitis, sarcoidosis, dermatitis, allogeneic transplant rejection),
 CC blood-related disorders (thrombosis, arterial thrombosis),
 CC hyperproliferative disorders, renal disorders (e.g. acute
 CC glomerulonephritis), endocrine disorders (e.g. Addison's disease,
 CC hyperthyroidism, hyperpituitarism), liver diseases and disorders,

CC reproductive system disorders (e.g. endometriosis), infectious diseases,
 CC and pancreatic disorders. Many other diseases and disorders are listed in
 CC the specification. They also useful as a vaccine adjuvant. Further they
 CC are useful to enhance or inhibit complement mediated cell lysis, for
 CC stimulating wound and tissue repair, angiogenesis, and the repair of
 CC vascular or lymphatic diseases or disorders. They are also useful
 CC to prevent hair loss, to modulate mammalian characteristics such as body
 CC height, weight, hair colour, and to increase or decrease storage
 CC capabilities, fat content, lipid, protein, carbohydrate, vitamins,
 CC minerals, cofactors or other nutritional components. The proteins are
 CC also useful for identifying binding partners. The present sequence
 CC represents a secreted protein of the invention.

XX Sequence 298 AA;

Query Match 99.7%; Score 1414; DB 24; Length 298;

Best Local Similarity 100.0%; Pred. No. 2e-111;

Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YHKAYGFSAPKDDQVVAVXQYQAILLACKTPKKTVXSRLEWKKLGRSVSFVYQQTLOGD 60
 DB 23 YHKAYGFSAPKDDQVVAVXQYQAILLACKTPKKTVXSRLEWKKLGRSVSFVYQQTLOGD 82
 QY 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQNLEEDTTLVLVAPVPSCEVP 120
 DB 83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQNLEEDTTLVLVAPVPSCEVP 142
 QY 121 SSALSGTVVELRCQDEKGNPAPEYTFWKGIRLLENPRLGQSQTNSYTMNTKTGLQFN 180
 DB 143 SSALSGTVVELRCQDEKGNPAPEYTFWKGIRLLENPRLGQSQTNSYTMNTKTGLQFN 202
 QY 181 TVSKLDTGEYSCEARNVGYRRCPCGRKMQVDDNLNIGIIAAVVVALVISVCGLVGYCYAQ 240
 DB 203 TVSKLDTGEYSCEARNVGYRRCPCGRKMQVDDNLNIGIIAAVVVALVISVCGLVGYCYAQ 262
 QY 241 RKGYSKETSFOKSNSSSKATTMSNDPFKHTKSFI 276
 DB 263 RKGYSKETSFOKSNSSSKATTMSNDPFKHTKSFI 298

RESULT 10

ABR00172

ID ABR00172 standard; Protein; 298 AA.

AC ABR00172;

DT 03-APR-2003 (first entry)

XX Human gene 162 encoded secreted protein HTEB42, SEQ ID NO:461.

DE Human; secreted protein; digestive disorder; gastrointestinal disorder;

XX mouth; oesophagus; stomach; small intestine; large intestine; liver;

KW biliary tract; pancreas; cancer; tumour; hyperproliferative disorder;

KW immune disorder; inflammation; infection; wound healing; drug screening;

KW chromosome identification; chromosome mapping; cytostatic; gene therapy;

KW antiinflammatory; immunosuppressive; vulnery; chromosome 21q21.2.

XX

OS Homo sapiens.

XX WO200276488-A1.

FN 03-OCT-2002.

PD 19-MAR-2002; 2002WO-US08276.

XX 21-MAR-2001; 2001US-277340P.

PR 19-JUL-2001; 2001US-306171P.

PR 13-NOV-2001; 2001US-331287P.

XX (HUMA-) HUMAN GENOME SCI INC.

PA Rosen CA, Ruben SM;

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DR WPI; 2003-029900/02.

DR N-PSDB; ABZ71351.

XX

PT New human secreted proteins and nucleic acids, useful for detecting,

PT preventing, diagnosing, prognosticating, treating and/or ameliorating

PT e.g. gastrointestinal diseases and disorders, or cancers -

XX

PS Claim 13; Page 1046-1047; 1216pp; English.

XX

CC ABZ71190-ABZ71478 represent cDNAs corresponding to 178 human secreted

CC protein genes, and ABP000299 represent the proteins they encode.

CC ABZ71479-ABZ71540 represent human secreted protein genomic fragments. The

CC invention also encompasses antibodies specific for the secreted proteins,

CC the use of the secreted proteins in drug screening, and recombinant

CC vectors and host cells comprising a nucleic acid of the invention. The

CC secreted proteins, nucleic acids encoding them, antibodies or antibody

CC fragments specific for the secreted proteins, and modulators of protein

CC activity are useful for diagnosing, treating, ameliorating or preventing

CC digestive disorders. Such conditions include disorders of the mouth,

CC oesophagus, stomach, small intestine, large intestine, liver, biliary

CC tract and pancreas, and include cancers of these organs and tissues. The

CC secreted proteins and their nucleic acids may also be used in the

CC treatment of immune disorders, inflammation, infection,

CC hyperproliferative disorders, and to promote wound healing. Nucleic acids

CC of the invention may be used for chromosome identification, chromosome

CC mapping, in gene therapy, for identifying individuals from minute

CC biological samples, as hybridisation probes, and as molecular weight

CC markers. The present sequence represents a human secreted protein of the

CC invention.

XX

XX Sequence 298 AA;

Query Match 99.7%; Score 1414; DB 24; Length 298;

Best Local Similarity 100.0%; Pred. No. 2e-111;

Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YHKAYGFSAPKDDQVVAVXQYQAILLACKTPKKTVXSRLEWKKLGRSVSFVYQQTLOGD 60

DB 23 YHKAYGFSAPKDDQVVAVXQYQAILLACKTPKKTVXSRLEWKKLGRSVSFVYQQTLOGD 82

QY 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQNLEEDTTLVLVAPVPSCEVP 120

DB 83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQNLEEDTTLVLVAPVPSCEVP 142

QY 121 SSALSGTVVELRCQDEKGNPAPEYTFWKGIRLLENPRLGQSQTNSYTMNTKTGLQFN 180

DB 143 SSALSGTVVELRCQDEKGNPAPEYTFWKGIRLLENPRLGQSQTNSYTMNTKTGLQFN 202

QY 181 TVSKLDTGEYSCEARNVGYRRCPCGRKMQVDDNLNIGIIAAVVVALVISVCGLVGYCYAQ 240

DB 203 TVSKLDTGEYSCEARNVGYRRCPCGRKMQVDDNLNIGIIAAVVVALVISVCGLVGYCYAQ 262

QY 241 RKGYSKETSFOKSNSSSKATTMSNDPFKHTKSFI 276

DB 263 RKGYSKETSFOKSNSSSKATTMSNDPFKHTKSFI 298

XX

XX

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[illegible]

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SQ      Sequence      312 AA;
Query Match      96.1%; Score 1362; DB 20; Length 312;
Best Local Similarity 99.2%; Pred. No. 5.3e-107;
Matches 264; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1 YHKAYGFSAPKDOQVVTAAYXQEAAILACKTPKKTIVXSRLEWKKLGRSVSFYYQOTLQGD 60
Db      23 YHKAYGFSAPKDOQVVTAAYXQEAAILACKTPKKTIVXSRLEWKKLGRSVSFYYQOTLQGD 82

QY      61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPEQONLEEDTTLVLVAPVAPVPSCEVP 120
Db      83 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPEQONLEEDTTLVLVAPVAPVPSCEVP 142

QY      121 SSALSGTVVELRCQDKEGNPAPEYTWFKDGIIRLLENPRLGQSQTNSSTYTNKTKGTGLQFN 180
Db      143 SSALSGTVVELRCQDKEGNPAPEYTWFKDGIIRLLENPRLGQSQTNSSTYTNKTKGTGLQFN 202

QY      181 TVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDNLNISGIIAAVVVVVALVISVCGLGVCYQAQ 240
Db      203 TVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDNLNISGIIAAVVVVVALVISVCGLGVCYQAQ 262

QY      241 RKGYFSKETSFOKSNSSSKATTMSEN 266
Db      263 RKGYFSKETSFOKSNSSSKATTMSEN 288

RESULT 13
AAV23324
ID      AAY23324 standard; Protein; 312 AA.
XX
AC      AAY23324;
XX
DT      02-SEP-1999 (first entry)
XX
DE      A33 related antigen PRO245.
KW      A33 related antigen; PRO301; PRO362; PRO245; inflammatory disease;
KW      tumour.
XX
OS      Homo sapiens.
XX
PN      WO9927098-A2.
XX
PD      03-JUN-1999.
XX
PF      20-NOV-1998; 98WO-US24855.
XX
PR      17-SEP-1998; 98WO-US19437.
PR      21-NOV-1997; 97US-0066364.
PR      20-MAR-1998; 98US-0078936.
XX
PA      (GETH ) GENENTECH INC.
XX
PI      Ashkenazi A, Fong S, Goddard A, Gurney AL, Napier MA;
PI      Tumas D, Wood WI;
XX
DR      WPI: 1999-404743/34.
DR      N-PSDB; AAX81770.
XX
PT      Antigens PRO301, PRO362 and PRO245 related to A33
XX
PS      Example 3; Fig 11; 122pp; English.
XX
CC      The specification describes A33 related antigens PRO301, PRO362 and
CC      PRO245. The methods and compositions of the invention are useful for the
CC      treatment and diagnosis of inflammatory disease and tumours in mammals.
CC      Such inflammatory diseases include of inflammatory bowel disease,
CC      systemic lupus erythematosus, rheumatoid arthritis, juvenile chronic
CC      arthritis, spondyloarthritis, systemic sclerosis, scleroderma,
CC      idiopathic inflammatory myopathies, dermatomyositis, polymyositis,
CC      Sjogren's syndrome, systemic vaculitis, sarcoidosis, autoimmune hemolytic
CC      anemia, immune pancytopenia, paroxysmal nocturnal hemoglobinuria,

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CC      autoimmune thrombocytopenia, idiopathic thrombocytopenic purpura,
CC      immune-mediated thrombocytopenia, thyroiditis, Grave's disease,
CC      Hashimoto's thyroiditis, juvenile lymphocytic thyroiditis, atrophic
CC      thyroiditis, diabetes mellitus, immune-mediated renal disease,
CC      glomerulonephritis, tubulointerstitial nephritis, demyelinating diseases
CC      of the central and peripheral nervous systems such as multiple sclerosis,
CC      idiopathic polyneuropathy, hepatobiliary diseases, infectious hepatitis,
CC      A, B, C, D, E, nonhepatotropic viruses, autoimmune chronic active
CC      hepatitis, primary biliary cirrhosis, granulomatous hepatitis, sclerosing
CC      cholangitis, inflammatory and fibrotic lung diseases, gluten-sensitive
CC      enteropathy, Whipple's disease, autoimmune or immune-mediated skin
CC      diseases allergic diseases of the lung such as eosinophilic pneumonias,
CC      idiopathic pulmonary fibrosis and hypersensitivity pneumonitis
CC      transplantation associated diseases disease. The present sequence
CC      represents PRO245.
XX
SQ      Sequence      312 AA;

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```

Query Match      96.1%; Score 1362; DB 20; Length 312;
Best Local Similarity 99.2%; Pred. No. 5.3e-107;
Matches 264; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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QY      1 YHKAYGFSAPKDOQVVTAAYXQEAAILACKTPKKTIVXSRLEWKKLGRSVSFYYQOTLQGD 60
Db      23 YHKAYGFSAPKDOQVVTAAYXQEAAILACKTPKKTIVXSRLEWKKLGRSVSFYYQOTLQGD 82

QY      61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPEQONLEEDTTLVLVAPVAPVPSCEVP 120
Db      83 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPEQONLEEDTTLVLVAPVAPVPSCEVP 142

QY      121 SSALSGTVVELRCQDKEGNPAPEYTWFKDGIIRLLENPRLGQSQTNSSTYTNKTKGTGLQFN 180
Db      143 SSALSGTVVELRCQDKEGNPAPEYTWFKDGIIRLLENPRLGQSQTNSSTYTNKTKGTGLQFN 202

QY      181 TVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDNLNISGIIAAVVVVVALVISVCGLGVCYQAQ 240
Db      203 TVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDNLNISGIIAAVVVVVALVISVCGLGVCYQAQ 262

QY      241 RKGYFSKETSFOKSNSSSKATTMSEN 266
Db      263 RKGYFSKETSFOKSNSSSKATTMSEN 288

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RESULT 14
AAV13354
ID      AAY13354 standard; Protein; 312 AA.
XX
AC      AAY13354;
XX
DT      25-JUN-1999 (first entry)
XX
DE      Amino acid sequence of protein PRO245.
XX
KW      Secreted protein; transmembrane protein; human; enterocolitis;
KW      Zollinger-Ellison syndrome; gastrointestinal ulceration;
KW      congenital microvillus atrophy; skin disease; cell growth;
KW      abnormal keratinocyte differentiation; psoriasis; epithelial cancer;
KW      Parkinson's disease; Alzheimer's disease; ALS; neuropathy;
KW      fibromodulin; dermal scarring; Usher Syndrome; Atrophia areata;
KW      anti-thrombotic; wound healing; tissue repair.
XX
OS      Homo sapiens.
XX
PN      WO9914328-A2.
XX
PD      25-MAR-1999.
XX
PF      16-SEP-1998; 98WO-US19330.
XX
PR      25-NOV-1997; 97US-0066840.
PR      17-SEP-1997; 97US-0059113.
PR      17-SEP-1997; 97US-0059115.
PR      17-SEP-1997; 97US-0059117.

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PR	20-APR-1999;	99WO-US08615.
PR	28-APR-1999;	99US-0131445.
PR	04-MAY-1999;	99US-0132371.
PR	14-MAY-1999;	99US-0134287.
PR	02-JUN-1999;	99WO-US12252.
PR	23-JUN-1999;	99US-0141037.
PR	20-JUL-1999;	99US-0144758.
PR	26-JUL-1999;	99US-0145698.
PR	28-JUL-1999;	99US-0146222.
PR	01-SEP-1999;	99WO-US20111.
PR	08-SEP-1999;	99WO-US20594.
PR	13-SEP-1999;	99WO-US20944.
PR	15-SEP-1999;	99WO-US21090.
PR	15-SEP-1999;	99WO-US21547.
PR	05-OCT-1999;	99WO-US23089.
PR	29-OCT-1999;	99US-0162506.
PR	29-NOV-1999;	99WO-US28214.
PR	30-NOV-1999;	99WO-US28313.
PR	30-NOV-1999;	99WO-US28409.
PR	01-DEC-1999;	99WO-US28301.
PR	02-DEC-1999;	99WO-US28634.
PR	02-DEC-1999;	99WO-US28551.
PR	02-DEC-1999;	99WO-US28564.
PR	02-DEC-1999;	99WO-US28565.
PR	16-DEC-1999;	99WO-US30095.
PR	20-DEC-1999;	99WO-US30999.
PR	30-DEC-1999;	99WO-US31274.
PR	05-JAN-2000;	2000WO-US00219.
PR	06-JAN-2000;	2000WO-US00277.
PR	06-JAN-2000;	2000WO-US00376.
PR	11-FEB-2000;	2000WO-US03565.
PR	18-FEB-2000;	2000WO-US04341.
PR	18-FEB-2000;	2000WO-US04342.
PR	22-FEB-2000;	2000WO-US04414.
XX		
PA	(GETH) GENENTECH INC.	
XX		
PI	Ashkenazi AJ, Baker KP, Goddard A, Gurney AL, Hebert C, Henzel W;	
PI	Kabakoff RC, Lu Y, Pan J, Pennica D, Shelton DL, Smith V;	
PI	Stewart TA, Tumas D, Watanabe CK, Wood WI, Yan M;	
XX		
DR	WPI; 2000-57271/53.	
DR	N-PSDB; AAC58586.	
XX		
PT	Sixty four PRO polypeptides, useful in the diagnosis and treatment of	
PT	immune related disorders, e.g. systemic lupus erythematosus, rheumatoid	
PT	arthritis, osteoarthritis, thyroiditis and diabetes mellitus -	
XX		
PS	Claim 33; Fig 16; 309pp; English.	
XX		
CC	The present invention describes sixty four human PRO proteins which can	
CC	be used in the treatment of immune related diseases. The human PRO	
CC	proteins, anti-PRO antibodies, agonists and antagonists are useful for	
CC	treating and diagnosing immune related disorders. The disorders are	
CC	selected from systemic lupus erythematosus, rheumatoid arthritis,	
CC	osteoarthritis, juvenile chronic arthritis, spondyloarthropathies,	
CC	systemic sclerosis, idiopathic inflammatory myopathies, Sjogren's	
CC	syndrome, systemic vasculitis, sarcoidosis, autoimmune haemolytic	
CC	anaemia, autoimmune thrombocytopaenia, thyroiditis, diabetes mellitus,	
CC	immune-mediated renal disease, demyelinating diseases of the central	
CC	and peripheral nervous systems, hepatobiliary diseases, inflammatory	
CC	bowel disease, gluten-sensitive enteropathy and Whipple's disease,	
CC	autoimmune or immune-mediated skin diseases, allergic diseases,	
CC	immunological diseases of the lung, and transplantation associated	
CC	diseases including graft rejection and graft-versus-host-disease.	
CC	AAC58397 to AAC58578 represent PCR primers and hybridisation probes used	
CC	in the isolation of human PRO sequences. AAC58579 to AAC58642 and	
CC	AAB33414 to AAB33477 represent human PRO polynucleotide and protein	
CC	sequences given in the exemplification of the present invention.	
XX		
SQ	Sequence 312 AA;	

Query Match 96.1%; Score 1362; DB 21; Length 312;

Best Local Similarity 99.2%; Pred. No. 5.3e-107;			
Matches 264; Conservative 0; Mismatches 2; Indels 0; Gaps 0;			
Qy	1	YHKAYGFSAPKDDQVVTVAVYQEAAILACKTPKKTVXSRLEWKLGSRVSFVYYQQTLOGD	60
Db	23	YHKAYGFSAPKDDQVVTVAVYQEAAILACKTPKKTVSSRLEWKLGSRVSFVYYQQTLOGD	82
Qy	61	FKRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSQGONLEEDTVTLEVLVAPVPSCEVP	120
Db	83	FKRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSQGONLEEDTVTLEVLVAPVPSCEVP	142
Qy	121	SSALSGTVVELRCQDKEGNPAPEYTFKDGIRLLENPRLGQSQTNSSTYTNKTGTLQFN	180
Db	143	SSALSGTVVELRCQDKEGNPAPEYTFKDGIRLLENPRLGQSQTNSSTYTNKTGTLQFN	202
Qy	181	TVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNISGIIAAVVVVVALVISVCGLGVCYQAQ	240
Db	203	TVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNISGIIAAVVVVVALVISVCGLGVCYQAQ	262
Qy	241	RKGYSKETSFOKSNSSSKATTWSEN	266
Db	263	RKGYSKETSFOKSNSSSKATTWSEN	288

Search completed: December 9, 2003, 17:11:13
Job time : 37.5436 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:10:36 ; Search time 14.4251 Seconds
(without alignments)
809.548 Million cell updates/sec

Title: US-09-852-797-76_COPY_23_298

Perfect score: 1418

Sequence: 1 YHKVGFSA PKDQVVAVX.....SSKATTMBSEDFKHTKSFII 276

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 328717 seqs, 42310858 residues

Total number of hits satisfying chosen parameters: 328717

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA:*

1: /cgn2_6/prodata/1/iaa/5A COMB.pap.*
2: /cgn2_6/prodata/1/iaa/5B COMB.pap.*
3: /cgn2_6/prodata/1/iaa/6A COMB.pap.*
4: /cgn2_6/prodata/1/iaa/6B COMB.pap.*
5: /cgn2_6/prodata/1/iaa/PCTUS COMB.pap.*
6: /cgn2_6/prodata/1/iaa/backfile1.pap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB ID	Description
1	1414	99.7	298	4	US-09-152-060-76
2	1362	96.1	312	4	US-09-254-465A-9
3	426	30.0	299	3	US-09-188-930-189
4	426	30.0	299	3	US-09-188-930-331
5	426	30.0	299	4	US-09-462-270-2
6	426	30.0	299	4	US-09-254-465A-1
7	426	30.0	299	4	US-09-312-283C-189
8	426	30.0	299	4	US-09-312-283C-331
9	410	28.9	300	4	US-09-254-465A-10
10	399	28.1	260	4	US-09-254-465A-23
11	399	28.1	263	4	US-09-254-465A-25
12	268.5	18.9	205	4	US-09-462-270-4
13	231	16.3	270	4	US-09-254-465A-24
14	231	16.3	273	4	US-09-254-465A-26
15	231	16.3	319	1	US-08-597-495B-22
16	231	16.3	319	3	US-09-068-051A-22
17	231	16.3	319	4	US-09-336-536-67
18	231	16.3	319	4	US-09-254-465A-6
19	219	15.4	318	3	US-09-068-051A-32
20	210	14.8	387	4	US-09-175-928-2
21	200	14.1	341	4	US-09-336-536-29
22	200	14.1	370	4	US-09-336-536-28
23	198	14.0	390	2	US-08-979-424-1
24	196	13.8	365	4	US-09-336-536-40
25	196	13.8	394	4	US-09-336-536-39
26	190.5	13.4	352	4	US-09-996-243-505
27	190.5	13.4	365	2	US-08-979-424-3

28	190.5	13.4	365	3	US-09-272-496-2	Sequence 2, Appli
29	186.5	13.2	365	3	US-08-928-383B-2	Sequence 2, Appli
30	183	12.9	365	3	US-08-928-383B-23	Sequence 23, Appli
31	183	12.9	365	3	US-08-928-383B-24	Sequence 24, Appli
32	180	12.7	365	3	US-08-928-383B-26	Sequence 26, Appli
33	178.5	12.6	246	4	US-09-336-536-31	Sequence 31, Appli
34	177.5	12.5	249	4	US-09-336-536-42	Sequence 42, Appli
35	175.5	12.4	466	4	US-09-604-107A-8	Sequence 8, Appli
36	160.5	11.3	805	3	US-08-985-526-34	Sequence 34, Appli
37	160.5	11.3	806	2	US-08-443-861-5	Sequence 5, Appli
38	160.5	11.3	806	3	US-08-193-829B-5	Sequence 5, Appli
39	160.5	11.3	1367	1	US-07-813-593-4	Sequence 4, Appli
40	160.5	11.3	1367	1	US-07-977-451-6	Sequence 6, Appli
41	160.5	11.3	1367	1	US-07-946-507-4	Sequence 4, Appli
42	160.5	11.3	1367	1	US-08-252-517-6	Sequence 6, Appli
43	160.5	11.3	1367	1	US-07-906-397A-6	Sequence 6, Appli
44	160.5	11.3	1367	1	US-08-601-891-6	Sequence 6, Appli
45	160.5	11.3	1367	2	US-08-443-861-2	Sequence 2, Appli

ALIGNMENTS

RESULT 1

US-09-152-060-76
; Sequence 76, Application US/09152060
; Patent No. 6448230
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003PI.US
; CURRENT APPLICATION NUMBER: US/09/152,060
; CURRENT FILING DATE: 1998-09-11
; EARLIER APPLICATION NUMBER: PCT/US98/04858
; EARLIER FILING DATE: 1998-03-12
; EARLIER APPLICATION NUMBER: 60/040,762
; EARLIER FILING DATE: 1997-03-14
; EARLIER APPLICATION NUMBER: 60/040,710
; EARLIER FILING DATE: 1997-03-14
; EARLIER APPLICATION NUMBER: 60/050,934
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/048,100
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/048,357
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/048,189
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/057,765
; EARLIER FILING DATE: 1997-09-05
; EARLIER APPLICATION NUMBER: 60/048,970
; EARLIER FILING DATE: 1997-06-06
; EARLIER APPLICATION NUMBER: 60/068,368
; EARLIER FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 118
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-152-060-76

Query Match 99.7%; Score 1414; DB 4; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.4e-130;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	1	YHKA	GFSAPKQOQVVTA	VX	QEAII	LACTPKTKTVX	SRLEWK	KLGRSV	FV	VYVYQQT	LQGD	60
Db	23	YHKA	GFSAPKQOQVVTA	VX	QEAII	LACTPKTKTVX	SRLEWK	KLGRSV	FV	VYVYQQT	LQGD	82
Qy	61	FKNRA	EMIDFNIRI	KNV	TRSDAG	KYRCEV	SA	PSEQOQ	NEEDVT	TVLE	VAPAP	120
Db	83	FKNRA	EMIDFNIRI	KNV	TRSDAG	KYRCEV	SA	PSEQOQ	NEEDVT	TVLE	VAPAP	142
Qy	121	SSAL	SGTVVELR	CDQK	EGNPA	PEYTF	W	KDGI	RLL	ENPR	LGSOST	180
Db	143	SSAL	SGTVVELR	CDQK	EGNPA	PEYTF	W	KDGI	RLL	ENPR	LGSOST	202
Qy	181	TVSK	LDTGEY	SCA	RNSV	G	YRCP	CGKRM	OV	DDL	NI	240
Db	203	TVSK	LDTGEY	SCA	RNSV	G	YRCP	CGKRM	OV	DDL	NI	262
Qy	241	RGYF	SKETS	FOK	SNSS	KAT	TMS	END	FK	HTK	SFII	276
Db	263	RGYF	SKETS	FOK	SNSS	KAT	TMS	END	FK	HTK	SFII	298

RESULT 2
US-09-254-465A-9
; Sequence 9, Application US/09254465A
; Patent No. 6410708
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Aehkenazi, Avi J.
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE TREATMENT
; OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
; FILE REFERENCE: P1216R1(US)
; CURRENT APPLICATION NUMBER: US/09/254,465A
; PRIOR FILING DATE: 1999-03-05
; PRIOR APPLICATION NUMBER: PCT/US98/24855
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 9
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-254-465A-9

Qy	241	RKGYSKETSFKQSNSSSKATTMS	266
Db	263	RKGYSKETSFKQSNSSSKATTMS	288

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RESULT 3
US-09-188-930-189
; Sequence 189, Application US/09188930A
; Patent No. 6150502
; GENERAL INFORMATION:
; APPLICANT: Watson, James D.
; APPLICANT: Strachan, Lorna
; APPLICANT: Sleeman, Matthew
; APPLICANT: Onrust, Rene
; APPLICANT: Murison, James Greg
; TITLE OF INVENTION: Compositions Isolated from
; TITLE OF INVENTION: and Methods For Their Use
; FILE REFERENCE: 11000.1011c1
; CURRENT APPLICATION NUMBER: US/09/188,930A
; CURRENT FILING DATE: 1998-11-09
; NUMBER OF SEQ ID NOS: 348
; SOFTWARE: Fast-SEQ for Windows Version 3.0
; SEQ ID NO 189
; LENGTH: 299
; TYPE: PRT
; ORGANISM: Human
; FEATURE:
; NAME/KEY: UNSURE
; LOCATION: (247) ... (247)
; NAME/KEY: UNSURE
; LOCATION: (289) ... (289)
US-09-188-930-189

```

```

RESULT 4
US-09-188-930331
; Sequence 331, Application US/09188930A
; Patent No. 6150502
; GENERAL INFORMATION:
; APPLICANT: Watson, James D.
; APPLICANT: Strachan, Lorna
; APPLICANT: Sleeman, Matthew
; APPLICANT: Onrust, Rene
; APPLICANT: Murison, James Greg
; TITLE OF INVENTION: Compositions Isol
; TITLE OF INVENTION: and Methods For Th
; FILE REFERENCE: 11000.1011c1
; CURRENT APPLICATION NUMBER: US/09/188
;

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; APPLICANT: Onrust, Rene
; APPLICANT: Murlison, James G.
; APPLICANT: Kumble, Krishanand D.
; TITLE OF INVENTION: Compositions Isolated from Skin Cells
; TITLE OF INVENTION: and Methods for Their Use
; FILE REFERENCE: 11000.1011c2
; CURRENT APPLICATION NUMBER: US/09/312,283C
; CURRENT FILING DATE: 1999-05-14
; NUMBER OF SEQ ID NOS: 425
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 189
; LENGTH: 299
; TYPE: PRT
; ORGANISM: Mouse
US-09-312-283C-189

Query Match      30.0%; Score 426; DB 4; Length 299;
Best Local Similarity 35.6%; Pred. No. 1e-33;
Matches 100; Conservative 42; Mismatches 99; Indels 40; Gaps 7;

QY 4 AY-GFSAPKQOVVAVXQYQAILACKTPKTVXSRLEWK-KLGRSVSFVYQOTLQDGF 61
DB 51 AYGSFSSP-----RVEWKFQDGTTRLVCYNNKITASY 83

QY 62 KNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQONLEEDTVTLEVLVAPVPSCEVPS 121
DB 84 EDRTVFLPTGITFKSVTRDGTGYTCWVS--BEGNSYGEVKVLVLVPPSKPTVNIIPS 141

QY 122 SALSQVTVVELRCQDKEGNPAPYTFWKDGIRLLENPRLGSSQSTNSSYTMNTKTGTLOQFNT 181
DB 142 SATIGNRAVLTCSEQDGGPPSEYTFWKDGIWMTNPKSTRAFNSSYVNLPTTGLVFPDP 201

QY 182 VSKLDTGEYSCARNVGVYRRCPEGK-RMQVDDNLNIGIIAAVVVALVIVSVCGLGVCYAQ 240
DB 202 LSASDTGEYSCARNVGYGTPMTSNAVRMEAVERNVGVIAAVALVTLILLGILVFGIWFAY 261

QY 241 RKGYSKETSFOKSNSSSKA-----TTMSENDFKHTKSFII 276
DB 262 SRGHFDRT---KKGTSKKVIYQSPSARSEGEFKQTSFLV 299

RESULT 9
US-09-254-465A-10
; Sequence 10, Application US/09254465A
; Patent No. 6410708
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; TITLE OF INVENTION: OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
; FILE REFERENCE: P121GRI(US)
; CURRENT APPLICATION NUMBER: US/09/254,465A
; CURRENT FILING DATE: 1999-03-05
; PRIOR APPLICATION NUMBER: PCT/US98/24855
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 10
; LENGTH: 300
; TYPE: PRT
; ORGANISM: Mus musculus
US-09-254-465A-10

Query Match      28.9%; Score 410; DB 4; Length 300;
Best Local Similarity 35.9%; Pred. No. 3.7e-32;
Matches 99; Conservative 49; Mismatches 116; Indels 12; Gaps 6;

QY 7 PSAPKQOVVAVXQYQAILACKTPKTVXSRLEWK-KLGRSVSFVYQOTLQDGFKNRA 65
DB 31 YTAQSDVQVPE-----NESIKLTCTYSGFSSPRVWKVQGSTTALVCYNSQITAPYADRV 86

QY 66 EMIDFNIRIKNVTRSDAGKYRCEVSAPSEQONLEEDTVTLEVLVAPVPSCEVPSALS 125
DB 87 TFSSTGTFSSVTRKNDGEYTCWVS--BEGQNYGEVSIHLTVLVPSPKPTISVPSSVTI 144

QY 126 GTTVVELRCQDKEGNPAPYTFWKDGIRLLENPRLGSSQSTNSSYTMNTKTGTLOQFNTVSK 184
DB 145 GNAVLTCSEHDGSPSPSEYFWKDGISMLTADAKKTRAFMNSFTIDPKSGDLIFDPVTA 204

QY 185 LDTGEYSCARNVGV-YRRCPEGKQVDDNLNIGIIAAVVVALVIVSVCGLGVCYAQKRG 243
DB 205 FDSEYTCQNGVGTAMRSEAAHMDAVELNVGGIVAAVLVTLILLGILVFGIWFAYSRG 264

QY 244 YF---SKETSFOKSNSSSKATMSENDFKHTKSFII 276
DB 265 YFETTKGTAPGKKVIYQSPSTRSEGEFKQTSFLV 300
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RESULT 10
US-09-254-465A-23
; Sequence 23, Application US/09254465A
; Patent No. 6410708
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
; FILE REFERENCE: P1216R1(US)
; CURRENT APPLICATION NUMBER: US/09/254,465A
; PRIOR FILING DATE: 1999-03-05
; PRIOR FILING DATE: 1998-11-20
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 23
; LENGTH: 260
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-254-465A-23

Query Match      28.1%; Score 399; DB 4; Length 260;
Best Local Similarity 35.5%; Pred. No. 3.6e-31;
Matches 94; Conservative 39; Mismatches 96; Indels 36; Gaps 6;

QY 4 AY-GFSAPKQQVTVAVXQEQAILACKTPKTVXSRLEWK-KLGRSVSFVYQOQLQDGF 61
Db 28 AYGFSSP-----RVEWKFQDQDTRTLVYNNKITASY 60
QY 62 KNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGNLEEDTVTLEVLVAPVPSCEVPS 121
Db 61 EDRVTFPLPTGTFKSVTRDGTGTCWVS--EEGNSGYEVKVKLVLPVPSKPTVNIPS 118
QY 122 SALSCTVVELRCQDEGNPAPYTFWKDGIRLLENPRLGSGQSTNSYTNWTKTGLQFNT 181
Db 19 SATIGNRAVLTCSEQDGGPPSEYTFWKDGI VMTNPKSTRAPSNSSYVNLPTTGLVFPD 178
QY 182 VSKLDTGEYSCEARNVGVRRCPGK-RMQVDDLNTSGIIAAVVVALVSVCGLVGYCAQ 240
Db 179 LSASDTGEYSCEARNGYTPMTSNVRAVMEAVERNVGVIAAVLVTLILLGLVFGIWFAY 238
QY 241 RKGYSKETSFKNSSSSKATTMSE 265
Db 239 SRGHFDR----TKKGTSSKKVIYSQ 259

RESULT 11
US-09-254-465A-25
; Sequence 25, Application US/09254465A
; Patent No. 6410708
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
; FILE REFERENCE: P1216R1(US)
; CURRENT APPLICATION NUMBER: US/09/254,465A
; PRIOR FILING DATE: 1999-03-05
; PRIOR FILING DATE: 1998-11-20
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 25
; LENGTH: 263
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-254-465A-25

Query Match      28.1%; Score 399; DB 4; Length 263;
Best Local Similarity 35.5%; Pred. No. 3.7e-31;
Matches 94; Conservative 39; Mismatches 96; Indels 36; Gaps 6;

QY 4 AY-GFSAPKQQVTVAVXQEQAILACKTPKTVXSRLEWK-KLGRSVSFVYQOQLQDGF 61
Db 31 AYGFSSP-----RVEWKFQDQDTRTLVYNNKITASY 63
QY 62 KNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGNLEEDTVTLEVLVAPVPSCEVPS 121
Db 64 EDRVTFPLPTGTFKSVTRDGTGTCWVS--EEGNSGYEVKVKLVLPVPSKPTVNIPS 121
QY 122 SALSCTVVELRCQDEGNPAPYTFWKDGIRLLENPRLGSGQSTNSYTNWTKTGLQFNT 181
Db 122 SATIGNRAVLTCSEQDGGPPSEYTFWKDGI VMTNPKSTRAPSNSSYVNLPTTGLVFPD 181
QY 182 VSKLDTGEYSCEARNVGVRRCPGK-RMQVDDLNTSGIIAAVVVALVSVCGLVGYCAQ 240
Db 182 LSASDTGEYSCEARNGYTPMTSNVRAVMEAVERNVGVIAAVLVTLILLGLVFGIWFAY 241
QY 241 RKGYSKETSFKNSSSSKATTMSE 265
Db 242 SRGHFDR----TKKGTSSKKVIYSQ 262

RESULT 12
US-09-462-270-4
; Sequence 4, Application US/09462270
; Patent No. 6358707
; GENERAL INFORMATION:
; APPLICANT: SmithKline Beecham Corporation
; TITLE OF INVENTION: Human Fil Antigen: A Cell Surface
; FILE REFERENCE: GH-70150US
; CURRENT APPLICATION NUMBER: US/09/462,270
; CURRENT FILING DATE: 2000-01-05
; PRIOR APPLICATION NUMBER: 60/052,186
; PRIOR FILING DATE: 1997-07-10
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 205
; TYPE: PRT
; ORGANISM: HOMO SAPIENS
US-09-462-270-4

Query Match      18.9%; Score 268.5; DB 4; Length 205;
Best Local Similarity 35.6%; Pred. No. 1.6e-18;
Matches 64; Conservative 22; Mismatches 63; Indels 31; Gaps 4;

QY 4 AY-GFSAPKQQVTVAVXQEQAILACKTPKTVXSRLEWK-KLGRSVSFVYQOQLQDGF 61
Db 51 AYGFSSP-----RVEWKFQDQDTRTLVYNNKITASY 83
```

QY 62 KNAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQGNLEEDTDTTLEVLVAPVPSCEVPS 121
Db 84 EDRVTELTGTITKSTREDTGYTCMVS--EEGNSYGEVKVLIVLPSPKPTVNIPS 141
QY 122 SALSQTVVELRCODKEGNPAPEYTFWKGIRLLENPRLGQSQTNSSTYMTKTGTLOFNT 181
Db 142 SATIGNRAVLTCSEQDGPSPSEYTFWKGIRVMPNPKSTRAFSNSSLVLPNTTGLVFES 201

RESULT 13

US-09-254-465A-24
; Sequence 24, Application US/09254465A
; Patent No. 6410708
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
; FILE REFERENCE: P1216R1(US)
; CURRENT APPLICATION NUMBER: US/09/254,465A
; PRIOR FILING DATE: 1999-03-05
; PRIOR APPLICATION NUMBER: PCT/US98/24855
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 24
; LENGTH: 270
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-254-465A-24

Query Match 16.3%; Score 231; DB 4; Length 270;
Best Local Similarity 28.6%; Pred. No. 1.1e-14;
Matches 72; Conservative 41; Mismatches 97; Indels 42; Gaps 11;
QY 8 SAPKQQVVAVXQAEAILACKTPKKTVXSR---LEWKKL-----GRSVSFVYQOT-LQ 58
Db 9 SVETPDVLRASQGSVTLPC-TYHTSSRGLQWDKLLTHTRVVIWPFSSKNYIH 67
QY 59 GD-FKNR-----AEMIDFNIRIKNVTSDAGKYRCEVSAPSEQGNLEEDT---VTLEV 108
Db 68 GELYKNRVSISNNAEQSDASITIDQLTWADNGTYECSVSLMSD-----LEGNTKSRVLLV 123
QY 109 LVAPAVPSCPSSALSQTVVELRCODKEGNPAPEYTFWKGIRLLENPRLGQSQTNSY 168
Db 124 LVPPSKPEGIEGETIIGNNLTQCSKEGSPTPQYSWKRYNINLQEQFLAQPASGQPV 183
QY 169 TWNTKTGTLOFNTVSKLDTGEYSCEARNVGVRRCP-GKRMQVDDLNTS-----GIIA 220
Db 184 LKNISTDT-----SGYIICITSSNEEGTQFCNITVAVRSPSMNVALLVGIAGVVA 233
QY 221 AVVVVALVISVC 232
Db 234 ALIIIGIIYYCC 245

RESULT 14

US-09-254-465A-26
; Sequence 26, Application US/09254465A
; Patent No. 6410708
; GENERAL INFORMATION:

; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
; FILE REFERENCE: P1216R1(US)
; CURRENT APPLICATION NUMBER: US/09/254,465A
; PRIOR FILING DATE: 1999-03-05
; PRIOR APPLICATION NUMBER: PCT/US98/24855
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 26
; LENGTH: 273
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-254-465A-26

Query Match 16.3%; Score 231; DB 4; Length 273;
Best Local Similarity 28.6%; Pred. No. 1.1e-14;
Matches 72; Conservative 41; Mismatches 97; Indels 42; Gaps 11;
QY 8 SAPKQQVVAVXQAEAILACKTPKKTVXSR---LEWKKL-----GRSVSFVYQOT-LQ 58
Db 12 SVETPDVLRASQGSVTLPC-TYHTSSRGLQWDKLLTHTRVVIWPFSSKNYIH 70
QY 59 GD-FKNR-----AEMIDFNIRIKNVTSDAGKYRCEVSAPSEQGNLEEDT---VTLEV 108
Db 71 GELYKNRVSISNNAEQSDASITIDQLTWADNGTYECSVSLMSD-----LEGNTKSRVLLV 126
QY 109 LVAPAVPSCPSSALSQTVVELRCODKEGNPAPEYTFWKGIRLLENPRLGQSQTNSY 168
Db 127 LVPPSKPEGIEGETIIGNNLTQCSKEGSPTPQYSWKRYNINLQEQFLAQPASGQPV 186
QY 169 TWNTKTGTLOFNTVSKLDTGEYSCEARNVGVRRCP-GKRMQVDDLNTS-----GIIA 220
Db 187 LKNISTDT-----SGYIICITSSNEEGTQFCNITVAVRSPSMNVALLVGIAGVVA 236
QY 221 AVVVVALVISVC 232
Db 237 ALIIIGIIYYCC 248

RESULT 15

US-08-597-495B-22
; Sequence 22, Application US/08597495B
; Patent No. 5712369
; GENERAL INFORMATION:
; APPLICANT: Old, Lloyd J.; Welt, Sydney; Ritter, Gerd;
; APPLICANT: Simpson, Richard J.; Nice, Edouard; Moritz, R. L.;
; APPLICANT: Catimel, B.; Ji, Hong; Burgess, Anthony W.;
; APPLICANT: Heath, Joan K.; White, Sara J.; Johnstone, Cameron
; TITLE OF INVENTION: Colon Cell And Colon Cancer Cell
; NUMBER OF SEQUENCES: 29
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Felfe & Lynch
; STREET: 805 Third Avenue
; CITY: New York City
; STATE: New York
; COUNTRY: USA
; ZIP: 10022
; COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette, 3.5 inch, 360 kb storage
COMPUTER: IBM PS/2
OPERATING SYSTEM: PC-DOS
SOFTWARE: Wordperfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/597,495B
FILING DATE: 02-Feb-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/511,876
FILING DATE: 04-Aug-1995
ATTORNEY/AGENT INFORMATION:
NAME: Hanson, No. 5712369man D.
REGISTRATION NUMBER: 30,946
REFERENCE/DOCKET NUMBER: LUD 5316.1
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 688-9200
TELEFAX: (212) 838-3884
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 319 amino acids
TYPE: amino acid
TOPOLOGY: linear
US-08-597-495B-22

Query Match 16.3%; Score 231; DB 1; Length 319;
Best Local Similarity 28.6%; Pred. No. 1.4e-14;
Matches 72; Conservative 41; Mismatches 97; Indels 42; Gaps 11;
QY 8 SAPKDOQVVAVYQEAAILACKTPKTVXSR---LEWKKL-----GRSVSFVYQOT-LQ 58
Db 23 SVETPDVLRASQGGKSVTLPC-TYHTSTSSRREGLIQDKLLLTHTRVVIWPFNSKNYIH 81
QY 59 GD-FKNR-----AEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQNLEEDT---VTLEV 108
Db 82 GELYKNRVYSISNNAEQSDASITIDQLTWADNGTYECSVSLMSD-----LEGNTKSRVRLV 137
QY 109 LVAPAVPSCVPSSALSSTVVELRCQDKGNPAPEYTWKDGIRLLENPRLGQSQTNSSY 168
Db 138 LVPPSKPCGIEGETIIGNNIQLTCQSKEGSPTPOYSWKRYNINLQEQPLAQPASGQPVS 197
QY 169 TMTTKTGTLOFNTVSKLDTGEYSCEARNVGYRCP-GRMQVDDLNIS-----GIIA 220
Db 198 LKNISTDT-----SGYICTSSNEEGTQFCNITVAVRSPSMNVALYGVAVGVA 247
QY 221 AVVVVALVIVC 232
Db 248 ALIIIGIIYCC 259

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:13:07 ; Search time 25.4843 seconds
(without alignments)
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Title: US-09-852-797-76_COPY_23_298

Perfect score: 1418

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Gapop 10.0 , Gapext 0.5

Searched: 684280 seqs, 185983659 residues

Total number of hits satisfying chosen parameters: 684280

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Published Applications AA:*
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15: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep.*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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1	1415	99.8	298	9	US-09-745-763-38
2	1415	99.8	298	9	US-09-799-777-50
3	1415	99.8	298	15	US-10-139-849-2
4	1415	99.8	298	16	US-10-192-791-2
5	1414	99.7	298	9	US-09-853-161-76
6	1414	99.7	298	9	US-09-852-659A-76
7	1414	99.7	298	10	US-09-852-797-76
8	1362	96.1	312	10	US-09-909-320-64
9	1362	96.1	312	10	US-09-909-088B-64
10	1362	96.1	312	10	US-09-905-291A-64
11	1362	96.1	312	10	US-09-953-499-9
12	1362	96.1	312	10	US-09-902-853-64
13	1362	96.1	312	10	US-09-907-824-64
14	1362	96.1	312	10	US-09-907-841-64
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16 1362 96.1 312 11 US-09-906-742-64 Sequence 64, Appl
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18 1362 96.1 312 11 US-09-907-613-64 Sequence 64, Appl
19 1362 96.1 312 11 US-09-907-942-64 Sequence 64, Appl
20 1362 96.1 312 11 US-09-904-859-64 Sequence 64, Appl
21 1362 96.1 312 11 US-09-909-204-64 Sequence 64, Appl
22 1362 96.1 312 11 US-09-904-820-64 Sequence 64, Appl
23 1362 96.1 312 11 US-09-904-786-64 Sequence 64, Appl
24 1362 96.1 312 11 US-09-906-546-64 Sequence 64, Appl
25 1362 96.1 312 11 US-09-906-700-64 Sequence 64, Appl
26 1362 96.1 312 11 US-09-903-786-64 Sequence 64, Appl
27 1362 96.1 312 11 US-09-902-903-64 Sequence 64, Appl
28 1362 96.1 312 11 US-09-903-749A-64 Sequence 64, Appl
29 1362 96.1 312 11 US-09-904-119-64 Sequence 64, Appl
30 1362 96.1 312 11 US-09-904-556-64 Sequence 64, Appl
31 1362 96.1 312 11 US-09-902-736-64 Sequence 64, Appl
32 1362 96.1 312 11 US-09-907-794-64 Sequence 64, Appl
33 1362 96.1 312 11 US-09-903-943-64 Sequence 64, Appl
34 1362 96.1 312 11 US-09-904-462-64 Sequence 64, Appl
35 1362 96.1 312 11 US-09-907-925-64 Sequence 64, Appl
36 1362 96.1 312 11 US-09-902-692-64 Sequence 64, Appl
37 1362 96.1 312 11 US-09-903-520-64 Sequence 64, Appl
38 1362 96.1 312 11 US-09-905-056-64 Sequence 64, Appl
39 1362 96.1 312 11 US-09-909-064-64 Sequence 64, Appl
40 1362 96.1 312 11 US-09-904-553-64 Sequence 64, Appl
41 1362 96.1 312 11 US-09-905-381-64 Sequence 64, Appl
42 1362 96.1 312 11 US-09-905-088-64 Sequence 64, Appl
43 1362 96.1 312 11 US-09-907-575-64 Sequence 64, Appl
44 1362 96.1 312 11 US-09-905-075-64 Sequence 64, Appl
45 1362 96.1 312 11 US-09-902-759-64 Sequence 64, Appl

ALIGNMENTS

RESULT 1

US-09-745-763-38
; Sequence 38 Application US/09745763
; Patent No. US2002065594A1
; GENERAL INFORMATION:
; APPLICANT: Jacobs, Kenneth
; McCoy, John M.
; LaVallie, Edward R.
; Collins-Racie, Lisa A.
; Evans, Cheryl
; Merberg, David
; Treacy, Maurice
; Spaulding, Vikki
; TITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES
; NUMBER OF SEQUENCES: 219
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genetics Institute, Inc.
; STREET: 87 CambridgePark Drive
; CITY: Cambridge
; STATE: MA
; COUNTRY: U.S.A.
; ZIP: 02140
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/745,763
; FILING DATE: 18-Jun-2000
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Sprunger, Suzanne A.
; REGISTRATION NUMBER: 41,323
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 498-8284
; TELEFAX: (617) 876-5851

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; INFORMATION FOR SEQ ID NO: 38:
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 298 amino acids
;   TYPE: amino acid
;   STRANDEDNESS: <unknown>
;   TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 38:
US-09-745-763-38

Query Match          99.8%; Score 1415; DB 9; Length 298;
Best Local Similarity 99.3%; Pred. No. 2.5e-125;
Matches 274; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 YHKAYGFSAPKDDQVVTVAVXQEAAILACKTPKKTVKYSLRLEWKKGSRVSFVYVYQQTLOGD 60
DB 23 YHKAYGFSAPKDDQVVTVAVXQEAAILACKTPKKTVKYSLRLEWKKGSRVSFVYVYQQTLOGD 82
QY 61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQNLEEDTVTLVLVAPVPSCEVP 120
DB 83 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQNLEEDTVTLVLVAPVPSCEVP 142
QY 121 SSALSGTVVELRCQDKEGNPAPEYTFWKGIRLLENPRLGSGSTNSSYTMNTKTGTLPFN 180
DB 143 SSALSGTVVELRCQDKEGNPAPEYTFWKGIRLLENPRLGSGSTNSSYTMNTKTGTLPFN 202
QY 181 TVSKLDTGEYSCAARNVGYRRCPCGRKMOVDLNLISGIIAAVVVALVVISVGLGVCYAQ 240
DB 203 TVSKLDTGEYSCAARNVGYRRCPCGRKMOVDLNLISGIIAAVVVALVVISVGLGVCYAQ 262
QY 241 RKGYSKETSFKQSNSSSKATTMSNDPFKHTKSFII 276
DB 263 RKGYSKETSFKQSNSSSKATTMSNDPFKHTKSFII 298

RESULT 2
US-09-799-777-30
; Sequence 30, Application US/09799777
; Patent No. US20020091244A1
; GENERAL INFORMATION:
; APPLICANT: Lal, Preeti
; Hillman, Jennifer L.
; Corley, Neil C.
; Guegler, Karl J.
; Baugh, Mariah
; Sather, Susan
; Shah, Purvi
; TITLE OF INVENTION: HUMAN SIGNAL PEPTIDE-CONTAINING PROTEINS
; NUMBER OF SEQUENCES: 154
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
; STREET: 3174 PORTER DRIVE
; CITY: PALO ALTO
; STATE: CALIFORNIA
; COUNTRY: USA
; ZIP: 94304
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/799,777
; FILING DATE: 06-Mar-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/002,485
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: BILLINGS, LUCY J.
; REGISTRATION NUMBER: 36,749
; REFERENCE/DOCKET NUMBER: PF-0459 US
; TELECOMMUNICATION INFORMATION:

; INFORMATION FOR SEQ ID NO: 39:
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 298 amino acids
;   TYPE: amino acid
;   STRANDEDNESS: <unknown>
;   TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 39:
US-09-799-777-30

Query Match          99.8%; Score 1415; DB 9; Length 298;
Best Local Similarity 99.3%; Pred. No. 2.5e-125;
Matches 274; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 YHKAYGFSAPKDDQVVTVAVXQEAAILACKTPKKTVKYSLRLEWKKGSRVSFVYVYQQTLOGD 60
DB 23 YHKAYGFSAPKDDQVVTVAVXQEAAILACKTPKKTVKYSLRLEWKKGSRVSFVYVYQQTLOGD 82
QY 61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQNLEEDTVTLVLVAPVPSCEVP 120
DB 83 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQNLEEDTVTLVLVAPVPSCEVP 142
QY 121 SSALSGTVVELRCQDKEGNPAPEYTFWKGIRLLENPRLGSGSTNSSYTMNTKTGTLPFN 180
DB 143 SSALSGTVVELRCQDKEGNPAPEYTFWKGIRLLENPRLGSGSTNSSYTMNTKTGTLPFN 202
QY 181 TVSKLDTGEYSCAARNVGYRRCPCGRKMOVDLNLISGIIAAVVVALVVISVGLGVCYAQ 240
DB 203 TVSKLDTGEYSCAARNVGYRRCPCGRKMOVDLNLISGIIAAVVVALVVISVGLGVCYAQ 262
QY 241 RKGYSKETSFKQSNSSSKATTMSNDPFKHTKSFII 276
DB 263 RKGYSKETSFKQSNSSSKATTMSNDPFKHTKSFII 298

RESULT 3
US-10-139-849-2
; Sequence 2, Application US/10139849
; Publication No. US20030079238A1
; GENERAL INFORMATION:
; APPLICANT: Cunningham, Sonia
; Barros, Maria Pia
; TITLE OF INVENTION: A POLYNUCLEOTIDE ENCODING A HUMAN
; JUNCTIONAL ADHESION PROTEIN (JAM 2)
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Rockey, Milnamow & Katz, Ltd.
; STREET: 180 N. Stetson Avenue, 2 Prudential Plaza,
; Suite 4700
; CITY: Chicago
; STATE: IL
; COUNTRY: U.S.A.
; ZIP: 60601
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/139,849
; FILING DATE: 07-May-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/643,929
; FILING DATE: 23-Aug-2000
; ATTORNEY/AGENT INFORMATION:
; NAME: Katz, Martin L.
; REGISTRATION NUMBER: 25,011
; TELECOMMUNICATION INFORMATION:

```

TELEPHONE: 312-616-5400
TELEFAX: 312-616-5460
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 298 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-10-139-849-2

Query Match 99.8%; Score 1415; DB 15; Length 298;
Best Local Similarity 99.3%; Pred. No. 2.5e-125;
Matches 274; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 YKAYGFSAPKDDQVVTAVYQEAAILACKTPKKTXXSRLEWKKLGRSVSFVYQOQLQGD 60
Db 23 YKAYGFSAPKDDQVVTAVYQEAAILACKTPKKTXXSRLEWKKLGRSVSFVYQOQLQGD 82
Qy 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQNLEEDTTLVLVAPVAPVPSCEVP 120
Db 83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQNLEEDTTLVLVAPVAPVPSCEVP 142
Qy 121 SSALSGTVVELRCQDKEGNPAPEYTFWKGIRLLENPRLGQSQTNSSTNTKTGLQFN 180
Db 143 SSALSGTVVELRCQDKEGNPAPEYTFWKGIRLLENPRLGQSQTNSSTNTKTGLQFN 202
Qy 181 TVSKLDTGEYSCARNVGYRRCPCGRMVDLNLISGIIAAVVVALVISVCGLGVCYQAQ 240
Db 203 TVSKLDTGEYSCARNVGYRRCPCGRMVDLNLISGIIAAVVVALVISVCGLGVCYQAQ 262
Qy 241 RKGYSKETSFKQSNSSSKATTMSNDPKHTKSFII 276
Db 263 RKGYSKETSFKQSNSSSKATTMSNDPKHTKSFII 298

RESULT 4
US-10-192-791-2
Sequence 2, Application US/10192791
Publication No. US20030130166A1
GENERAL INFORMATION:
APPLICANT: Texas Biotechnology Corporation
TITLE OF INVENTION: A Polynucleotide Encoding a Human Junctional Adhesion Protein (JA
FILE REFERENCE: TEX4542P0430
CURRENT APPLICATION NUMBER: US/10/192,791
CURRENT FILING DATE: 2003-12-10
NUMBER OF SEQ ID NOS: 10
SOFTWARE: PatentIn version 3.1
SEQ ID NO 2
LENGTH: 298
TYPE: PRT
ORGANISM: Homo sapiens
US-10-192-791-2

Query Match 99.8%; Score 1415; DB 16; Length 298;
Best Local Similarity 99.3%; Pred. No. 2.5e-125;
Matches 274; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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Db 23 YKAYGFSAPKDDQVVTAVYQEAAILACKTPKKTXXSRLEWKKLGRSVSFVYQOQLQGD 82
Qy 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQNLEEDTTLVLVAPVAPVPSCEVP 120
Db 83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQNLEEDTTLVLVAPVAPVPSCEVP 142
Qy 121 SSALSGTVVELRCQDKEGNPAPEYTFWKGIRLLENPRLGQSQTNSSTNTKTGLQFN 180
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Qy 241 RKGYSKETSFKQSNSSSKATTMSNDPKHTKSFII 276
Db 263 RKGYSKETSFKQSNSSSKATTMSNDPKHTKSFII 298

RESULT 5

US-09-853-161-76
Sequence 76, Application US/09853161
Patent No. US20020076756A1
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: 28 Human Secreted Proteins
FILE REFERENCE: P2003P3
CURRENT APPLICATION NUMBER: US/09/853,161
CURRENT FILING DATE: 2001-05-11
PRIOR APPLICATION NUMBER: 60/265,583
PRIOR FILING DATE: 2001-02-02
PRIOR APPLICATION NUMBER: 09/152,060
PRIOR FILING DATE: 1998-09-11
PRIOR APPLICATION NUMBER: PCT/US98/04858
PRIOR FILING DATE: 1998-03-12
PRIOR APPLICATION NUMBER: 60/040,762
PRIOR FILING DATE: 1997-03-14
PRIOR APPLICATION NUMBER: 60/040,710
PRIOR FILING DATE: 1997-03-14
PRIOR APPLICATION NUMBER: 60/050,934
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/048,100
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/048,357
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/048,189
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/057,765
PRIOR FILING DATE: 1997-09-05
PRIOR APPLICATION NUMBER: 60/048,970
PRIOR FILING DATE: 1997-06-06
PRIOR APPLICATION NUMBER: 60/069,368
PRIOR FILING DATE: 1997-12-19
NUMBER OF SEQ ID NOS: 118
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 76
LENGTH: 298
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SITE
LOCATION: (42)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (58)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-853-161-76

Query Match 99.7%; Score 1414; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 3.1e-125;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YKAYGFSAPKDDQVVTAVYQEAAILACKTPKKTXXSRLEWKKLGRSVSFVYQOQLQGD 60
Db 23 YKAYGFSAPKDDQVVTAVYQEAAILACKTPKKTXXSRLEWKKLGRSVSFVYQOQLQGD 82
Qy 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQNLEEDTTLVLVAPVAPVPSCEVP 120
Db 83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQNLEEDTTLVLVAPVAPVPSCEVP 142
Qy 121 SSALSGTVVELRCQDKEGNPAPEYTFWKGIRLLENPRLGQSQTNSSTNTKTGLQFN 180
Db 143 SSALSGTVVELRCQDKEGNPAPEYTFWKGIRLLENPRLGQSQTNSSTNTKTGLQFN 202
Qy 181 TVSKLDTGEYSCARNVGYRRCPCGRMVDLNLISGIIAAVVVALVISVCGLGVCYQAQ 240

Db 203 TVSKLDTGEYSCEARNVGYRRCPCGKMQVDDLNISGIIAAVVVVVALVIVSVCGLGVCYAQ 262
QY 241 RKGYFSKETSFOKSNSSSKATTMSENDFKHTKSFII 276
Db 263 RKGYFSKETSFOKSNSSSKATTMSENDFKHTKSFII 298

RESULT 6

US-09-852-659A-76
; Sequence 76, Application US/09852659A
; Patent No. US20020077287A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003P4
; CURRENT APPLICATION NUMBER: US/09/852,659A
; CURRENT FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/265,583
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 09/152,060
; PRIOR FILING DATE: 1998-09-11
; PRIOR APPLICATION NUMBER: PCT/US98/04858
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/040,762
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/040,710
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/050,934
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,100
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,357
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,189
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/057,765
; PRIOR FILING DATE: 1997-09-05
; PRIOR APPLICATION NUMBER: 60/048,970
; PRIOR FILING DATE: 1997-06-06
; PRIOR APPLICATION NUMBER: 60/068,368
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 121
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-852-659A-76

Query Match 99.7%; Score 1414; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 3.1e-125;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 YHKAYGFSAPKDDQVVTVAVXYQEAILACKTPKTVKXSRLEWKLGSRVSFVYYQOTLQGD 60
Db 23 YHKAYGFSAPKDDQVVTVAVXYQEAILACKTPKTVKXSRLEWKLGSRVSFVYYQOTLQGD 82
QY 61 FKNRAEMIDFNIRIKNVTSDAGKRCVSAPEQONLEEDTVTLVLVAPVPSCEVP 120
Db 83 FKNRAEMIDFNIRIKNVTSDAGKRCVSAPEQONLEEDTVTLVLVAPVPSCEVP 142
QY 121 SSALSGTVVLRCDQKGNPAPEYTWFKDGIKLLNPRIGSOSTNSSYTMNTKTGLQFN 180
Db 143 SSALSGTVVLRCDQKGNPAPEYTWFKDGIKLLNPRIGSOSTNSSYTMNTKTGLQFN 202

QY 181 TVSKLDTGEYSCEARNVGYRRCPCGKMQVDDLNISGIIAAVVVVVALVIVSVCGLGVCYAQ 240
Db 203 TVSKLDTGEYSCEARNVGYRRCPCGKMQVDDLNISGIIAAVVVVVALVIVSVCGLGVCYAQ 262
QY 241 RKGYFSKETSFOKSNSSSKATTMSENDFKHTKSFII 276
Db 263 RKGYFSKETSFOKSNSSSKATTMSENDFKHTKSFII 298

RESULT 7

US-09-852-797-76
; Sequence 76, Application US/09852797
; Patent No. US20020172994A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003P2
; CURRENT APPLICATION NUMBER: US/09/852,797
; CURRENT FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/265,583
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 09/152,060
; PRIOR FILING DATE: 1998-09-11
; PRIOR APPLICATION NUMBER: PCT/US98/04858
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/040,762
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/040,710
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/050,934
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,100
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,357
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,189
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/057,765
; PRIOR FILING DATE: 1997-09-05
; PRIOR APPLICATION NUMBER: 60/048,970
; PRIOR FILING DATE: 1997-06-06
; PRIOR APPLICATION NUMBER: 60/068,368
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 118
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-852-797-76

Query Match 99.7%; Score 1414; DB 10; Length 298;
Best Local Similarity 100.0%; Pred. No. 3.1e-125;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 YHKAYGFSAPKDDQVVTVAVXYQEAILACKTPKTVKXSRLEWKLGSRVSFVYYQOTLQGD 60
Db 23 YHKAYGFSAPKDDQVVTVAVXYQEAILACKTPKTVKXSRLEWKLGSRVSFVYYQOTLQGD 82
QY 61 FKNRAEMIDFNIRIKNVTSDAGKRCVSAPEQONLEEDTVTLVLVAPVPSCEVP 120
Db 83 FKNRAEMIDFNIRIKNVTSDAGKRCVSAPEQONLEEDTVTLVLVAPVPSCEVP 142
QY 121 SSALSGTVVLRCDQKGNPAPEYTWFKDGIKLLNPRIGSOSTNSSYTMNTKTGLQFN 180
Db 143 SSALSGTVVLRCDQKGNPAPEYTWFKDGIKLLNPRIGSOSTNSSYTMNTKTGLQFN 202

QY 181 TVSKLDTGEYSCARNVGYRRCPGKRMQVDDNLISGIIAAVVVVVALVISVCGLGVCYAO 240
Db 203 TVSKLDTGEYSCARNVGYRRCPGKRMQVDDNLISGIIAAVVVVVALVISVCGLGVCYAO 262
QY 241 RKGYSKETSFOKSNSSKATTMSNDFKHTKSPFI 276
Db 263 RKGYSKETSFOKSNSSKATTMSNDFKHTKSPFI 298

RESULT 8
US-09-909-320-64
; Sequence 64, Application US/09909320
; Patent No. US20020132240A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/909,320
; CURRENT FILING DATE: 2002-01-04
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16

; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-909-320-64

Query Match 96.1%; Score 1362; DB 10; Length 312;
Best Local Similarity 99.2%; Pred. No. 2.7e-120;
Matches 264; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 YHKAYGFSAPKQQVVTVAVXQBAIIACKTPKKTVAISRLKWKLGSRVSFVYQQTLQGD 60
Db 23 YHKAYGFSAPKQQVVTVAVXQBAIIACKTPKKTVAISRLKWKLGSRVSFVYQQTLQGD 82
QY 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQONLEEDVTTLVLVAPVAPSCVP 120
Db 83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQONLEEDVTTLVLVAPVAPSCVP 142
QY 121 SSALSGTVVVELRCODKEGNPAEYTWFKDGIIRLLENPRILGSSQSTNSSTYTMNTKTGLQFN 180
Db 143 SSALSGTVVVELRCODKEGNPAEYTWFKDGIIRLLENPRILGSSQSTNSSTYTMNTKTGLQFN 202
QY 181 TVSKLDTGEYSCARNVGYRRCPGKRMQVDDNLISGIIAAVVVVVALVISVCGLGVCYAO 240
Db 203 TVSKLDTGEYSCARNVGYRRCPGKRMQVDDNLISGIIAAVVVVVALVISVCGLGVCYAO 262
QY 241 RKGYSKETSFOKSNSSKATTMSN 266
Db 263 RKGYSKETSFOKSNSSKATTMSN 288

RESULT 9
US-09-909-088B-64
; Sequence 64, Application US/09909088B
; Patent No. US20020146709A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/909,088B
; CURRENT FILING DATE: 2001-07-18

; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-909-088B-64

Query Match 96.1%; Score 1362; DB 10; Length 312;
Best Local Similarity 99.2%; Pred. No. 2.7e-120;
Matches 264; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 YHAYGFSAPKQOVVAVYQBAIIACKTPKTVASRLWKLGSRVSFVYVYQQTLOGD 60
DB 23 YHAYGFSAPKQOVVAVYQBAIIACKTPKTVASRLWKLGSRVSFVYVYQQTLOGD 82

QY 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQONLEEDTTLVLVAPVPSCEVP 120
DB 83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQONLEEDTTLVLVAPVPSCEVP 142

QY 121 SSALSGTVVVELRCQDEKGNPAPEYTFKDGIRLLENPRLGSSSTNSSTYMTKTGTLQFN 180
DB 143 SSALSGTVVVELRCQDEKGNPAPEYTFKDGIRLLENPRLGSSSTNSSTYMTKTGTLQFN 202

QY 181 TVSKLDTGYSCEARNVSGYRCPGKRMQVDLNLISGIIIAAVVVALVIVSVCGLGVCYAQ 240
DB 203 TVSKLDTGYSCEARNVSGYRCPGKRMQVDLNLISGIIIAAVVVALVIVSVCGLGVCYAQ 262

QY 241 RKGYFSKETSFKNSSSSKATTMSN 266
DB 263 RKGYFSKETSFKNSSSSKATTMSN 288

RESULT 10
US-09-905-291A-64
; Sequence 64, Application US/09905291A
; Patent No. US20020160374A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi

; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gertitsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/905,291A
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-905-291A-64

Query Match 96.1%; Score 1362; DB 10; Length 312;
Best Local Similarity 99.2%; Pred. No. 2.7e-120;
Matches 264; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy	1	YHKAYGFSAPKDDQVVVTAVYQOEAILACKTPKKTIVXSRLEWKKLGRSVSFVYVYQQTLOGD	60
Db	23	YHKAYGFSAPKDDQVVVTAVEYQOEAILACKTPKKTIVSSRLLEWKKLGRSVSFVYVYQQTLOGD	82
Qy	61	PKNRAEMIDFNIRIKNVNTRSDAGKRVCEVSAPEQOQNLEEDTVTLEVLVAPAPVSCVVP	120
Db	83	PKNRAEMIDFNIRIKNVNTRSDAGKRVCEVSAPEQOQNLEEDTVTLEVLVAPAPVSCVVP	142
Qy	121	SSALSGTIVVELRCQDEKGNPAPEYTFKDGIRLLENPRLGOSTNSSYTMNTKTGTLQFN	180
Db	143	SSALSGTIVVELRCQDEKGNPAPEYTFKDGIRLLENPRLGOSTNSSYTMNTKTGTLQFN	202
Qy	181	TVSKLDTGEYSCAARNVGYRRCPCGRQVDDNLNIGIIIAAVVVALVIVSCGLGVCYAQ	240
Db	203	TVSKLDTGEYSCAARNVGYRRCPCGRQVDDNLNIGIIIAAVVVALVIVSCGLGVCYAQ	262
Qy	241	RKYFYSKETSFOKGNSSSKATTMSN	266
Db	263	RKYFYSKETSFOKGNSSSKATTMSN	288

RESULT 11
US-09-953-499-9
; Sequence 9, Application US/09953499
; Publication No. US20020182206A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
; FILE REFERENCE: P1216R1(US)
; CURRENT APPLICATION NUMBER: US/09/953,499
; CURRENT FILING DATE: 2001-09-14
; PRIOR APPLICATION NUMBER: US/09/254,465
; PRIOR FILING DATE: 1999-03-05
; PRIOR APPLICATION NUMBER: PCT/US98/24855
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 9
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-953-499-9

Db	203	TVSKLDTGEYSCARNVGVRRCPGKRMQVDDLNSGIIAAVVVVVALVTVSVCGLGVCAAC
Qy	241	RKGYSKETSFOKSNSSSKATTMSN 266
Db	263	RKGYSKETSFOKSNSSSKATTMSN 288

RESULT 12

US-09-902-853-64

Sequence 64, Application US/09902853

Publication No. US20020192659A1

GENERAL INFORMATION:

APPLICANT: Genentech, Inc.

APPLICANT: Ashkenazi, Avi

APPLICANT: Botstein, David

APPLICANT: Desnoyers, Luc

APPLICANT: Eaton, Dan L.

APPLICANT: Ferrara, Napoleone

APPLICANT: Filvaroff, Ellen

APPLICANT: Fong, Sherman

APPLICANT: Gao, Wei-Qiang

APPLICANT: Gerber, Hanspeter

APPLICANT: Gerritsen, Mary E.

APPLICANT: Goddard, A.

APPLICANT: Godowski, Paul J.

APPLICANT: Grimaldi, Christopher J.

APPLICANT: Gurney, Austin L.

APPLICANT: Hillan, Kenneth, J.

APPLICANT: Kljavin, Ivar J.

APPLICANT: Mather, Jennie P.

APPLICANT: Pan, James

APPLICANT: Paoni, Nicholas F.

APPLICANT: Roy, Margaret Ann

APPLICANT: Stewart, Timothy A.

APPLICANT: Tumas, Daniel

APPLICANT: Williams, P. Mickey

APPLICANT: Wood, William, I.

TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic

TITLE OF INVENTION: Acids Encoding the Same

FILE REFERENCE: 10466-14

CURRENT APPLICATION NUMBER: US/09/902,853

CURRENT FILING DATE: 2001-07-10

PRIOR APPLICATION NUMBER: US/09/665,350

PRIOR FILING DATE: 2000-09-18

PRIOR APPLICATION NUMBER: US 60/143,048

PRIOR FILING DATE: 1999-07-07

PRIOR APPLICATION NUMBER: US 60/145,698

PRIOR FILING DATE: 1999-07-26

PRIOR APPLICATION NUMBER: US 60/146,222

PRIOR FILING DATE: 1999-07-28

PRIOR APPLICATION NUMBER: PCT/US99/20594

PRIOR FILING DATE: 1999-09-08

PRIOR APPLICATION NUMBER: PCT/US99/20944

PRIOR FILING DATE: 1999-09-13

PRIOR APPLICATION NUMBER: PCT/US99/21090

PRIOR FILING DATE: 1999-09-15

PRIOR APPLICATION NUMBER: PCT/US99/21547

PRIOR FILING DATE: 1999-09-15

PRIOR APPLICATION NUMBER: PCT/US99/23089

PRIOR FILING DATE: 1999-10-05

PRIOR APPLICATION NUMBER: PCT/US99/28214

PRIOR FILING DATE: 1999-11-29

PRIOR APPLICATION NUMBER: PCT/US99/28313

PRIOR FILING DATE: 1999-11-30

PRIOR APPLICATION NUMBER: PCT/US99/28564

PRIOR FILING DATE: 1999-12-02

PRIOR APPLICATION NUMBER: PCT/US99/28565

PRIOR FILING DATE: 1999-12-02

PRIOR APPLICATION NUMBER: PCT/US99/30095

PRIOR FILING DATE: 1999-12-16

PRIOR APPLICATION NUMBER: PCT/US99/30911

PRIOR FILING DATE: 1999-12-20


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; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-902-853-64

Query Match          96.1%; Score 1362; DB 10; Length 312;
Best Local Similarity 99.2%; Pred. No. 2.7e-120;
Matches 264; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 YHKAYGFSAPKDDQVVAVYQAEAILACKTPKTKVXSRLEWKLGSRVSFVYQQTLQGD 60
Db 23 YHKAYGFSAPKDDQVVAVYQAEAILACKTPKTKVXSRLEWKLGSRVSFVYQQTLQGD 82
QY 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGNLEEDVTTLVLVAPVPSCEVP 120
Db 83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGNLEEDVTTLVLVAPVPSCEVP 142
QY 121 SSALSGTVVLRCDKEGNPAPEYTWFKDGIRLLENPRLGSGSTNSSTYMTKTGLQFN 180
Db 143 SSALSGTVVLRCDKEGNPAPEYTWFKDGIRLLENPRLGSGSTNSSTYMTKTGLQFN 202
QY 181 TVSKLDTGEYSCEARNVGVRCPCGRMQVDDLNISGIIAAVVVALVISVCGLGVCYQAQ 240
Db 203 TVSKLDTGEYSCEARNVGVRCPCGRMQVDDLNISGIIAAVVVALVISVCGLGVCYQAQ 262
QY 241 RKGYFSKETSFOKSNSSSKATTMSEN 266
Db 263 RKGYFSKETSFOKSNSSSKATTMSEN 288

RESULT 13
US-09-907-824-64
; Sequence 64, Application US/09907824
; Publication No. US20020197671A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/907,824
; CURRENT FILING DATE: 2001-07-17
; PRIOR APPLICATION NUMBER: 09/665,350
; PRIOR FILING DATE: 2000-09-18

; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-907-824-64

Query Match          96.1%; Score 1362; DB 10; Length 312;
Best Local Similarity 99.2%; Pred. No. 2.7e-120;
Matches 264; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 YHKAYGFSAPKDDQVVAVYQAEAILACKTPKTKVXSRLEWKLGSRVSFVYQQTLQGD 60
Db 23 YHKAYGFSAPKDDQVVAVYQAEAILACKTPKTKVXSRLEWKLGSRVSFVYQQTLQGD 82
QY 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGNLEEDVTTLVLVAPVPSCEVP 120
Db 83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGNLEEDVTTLVLVAPVPSCEVP 142
QY 121 SSALSGTVVLRCDKEGNPAPEYTWFKDGIRLLENPRLGSGSTNSSTYMTKTGLQFN 180
Db 143 SSALSGTVVLRCDKEGNPAPEYTWFKDGIRLLENPRLGSGSTNSSTYMTKTGLQFN 202
QY 181 TVSKLDTGEYSCEARNVGVRCPCGRMQVDDLNISGIIAAVVVALVISVCGLGVCYQAQ 240
Db 203 TVSKLDTGEYSCEARNVGVRCPCGRMQVDDLNISGIIAAVVVALVISVCGLGVCYQAQ 262
QY 241 RKGYFSKETSFOKSNSSSKATTMSEN 266
Db 263 RKGYFSKETSFOKSNSSSKATTMSEN 288

RESULT 14
US-09-907-841-64
; Sequence 64, Application US/09907841
; Publication No. US20020198366A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
```

APPLICANT: Botstein, David
APPLICANT: Deenoyers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Filvaroff, Ellen
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerber, Hanspeter
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, A.
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Gurney, Austin L.
APPLICANT: Hillan, Kenneth, J.
APPLICANT: Kljavin, Ivar J.
APPLICANT: Mather, Jennie P.
APPLICANT: Pan, James
APPLICANT: Paoni, Nicholas F.
APPLICANT: Roy, Margaret Ann
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/907,841
PRIOR FILING DATE: 2001-11-20
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: US 60/143,048
PRIOR FILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/145,698
PRIOR FILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR FILING DATE: 1999-07-28
PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR FILING DATE: 1999-09-08
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR FILING DATE: 1999-09-13
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/21547
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/23089
PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: PCT/US99/28214
PRIOR FILING DATE: 1999-11-29
PRIOR APPLICATION NUMBER: PCT/US99/28313
PRIOR FILING DATE: 1999-11-30
PRIOR APPLICATION NUMBER: PCT/US99/28564
PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/28565
PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/30095
PRIOR FILING DATE: 1999-12-16

Query Match 96.1%; Score 1362; DB 10; Length 312;
Best Local Similarity 99.2%; Pred. No. 2.7e-120;
Matches 264; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

1 YHKYGFSAKPKDQOVVTAIXYQEAIIACKTPKTVASRLWKLGSRVSFVYQQTLQGD 60
23 YHKYGFSAKPKDQOVVTAIXYQEAIIACKTPKTVASRLWKLGSRVSFVYQQTLQGD 82
61 FKNRAEMDFNIRIKNVTSDAGKRCVSAFSEGOQNLEEDVTLEVLVAFAVPSCEVP 120
83 FKNRAEMDFNIRIKNVTSDAGKRCVSAFSEGOQNLEEDVTLEVLVAFAVPSCEVP 142
121 SSALSGTVLRCQDEKGNPAPEYTFWKGIRLLENPRLGSGSTNSSTMTKTGTLPQN 180
143 SSALSGTVLRCQDEKGNPAPEYTFWKGIRLLENPRLGSGSTNSSTMTKTGTLPQN 202
181 TVSKLDTGEYSCEARNVSGYRCPGRMQVDLDNISGIIAAVVVALVISVCGLVGYCAQ 240

Db 203 TVSKLDTGEYSCEARNVSGYRCPGRMQVDLDNISGIIAAVVVALVISVCGLVGYCAQ 262
Qy 241 RKGYSKETSFKSNSSSKATTMSEN 266
Db 263 RKGYSKETSFKSNSSSKATTMSEN 288

RESULT 15
US-09-904-011-64
Sequence 64, Application US/09904011
Publication No. US20030003530A1
GENERAL INFORMATION:
APPLICANT: Genentech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
APPLICANT: Deenoyers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Filvaroff, Ellen
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerber, Hanspeter
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, A.
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Gurney, Austin L.
APPLICANT: Hillan, Kenneth, J.
APPLICANT: Kljavin, Ivar J.
APPLICANT: Mather, Jennie P.
APPLICANT: Pan, James
APPLICANT: Paoni, Nicholas F.
APPLICANT: Roy, Margaret Ann
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/904,011
PRIOR FILING DATE: 2001-07-11
PRIOR APPLICATION NUMBER: 09/665,350
PRIOR FILING DATE: 2000-09-18
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: US 60/143,048
PRIOR FILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/145,698
PRIOR FILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR FILING DATE: 1999-07-28
PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR FILING DATE: 1999-09-08
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR FILING DATE: 1999-09-13
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR FILING DATE: 1999-09-15
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PRIOR APPLICATION NUMBER: PCT/US99/28564
PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/28565
PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/30095
PRIOR FILING DATE: 1999-12-16

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; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-904-011-64

Query Match      96.1%; Score 1362; DB 11; Length 312;
Best Local Similarity 99.2%; Pred. No. 2.7e-120;
Matches 264; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy   1 YHKAYGFSAPKQQQVTVAVYQEAAILACKTPKKTVXSRLWKLGSRVSFVYYQOTLQGD 60
Db   23 YHKAYGFSAPKQQQVTVAVYQEAAILACKTPKKTVXSRLWKLGSRVSFVYYQOTLQGD 82

Qy   61 FKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEGGQNLEEDTVTLEVLVAPVPSCEVP 120
Db   83 FKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEGGQNLEEDTVTLEVLVAPVPSCEVP 142

Qy   121 SSALSGTVVELRCODKEGNPAPEYTWPKDGIRLLENPRLGQSQTNSSTYMTNKTGTLQFN 180
Db   143 SSALSGTVVELRCODKEGNPAPEYTWPKDGIRLLENPRLGQSQTNSSTYMTNKTGTLQFN 202

Qy   181 TVSKLDTGEYSCEARNVGYRRCQKRMQVDDLNISGIIAAVVVVALVISVCGLGVCYQAQ 240
Db   203 TVSKLDTGEYSCEARNVGYRRCQKRMQVDDLNISGIIAAVVVVALVISVCGLGVCYQAQ 262

Qy   241 RKGYSKETSFKQSNSSSKATTMSN 266
Db   263 RKGYSKETSFKQSNSSSKATTMSN 288

Search completed: December 9, 2003, 17:22:01
Job time : 25.4843 secs
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GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: December 9, 2003, 17:09:51 ; Search time 13.9443 Seconds
(without alignment)
1903.477 Million cell updates/sec

Title: US-09-852-797-76_COPY_23_298
Perfect score: 1418
Sequence: 1 YHKAYGFSAPKDDQVTVAVX.....SSKATTMSSEDFKTKSFII 276

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283308 seqs, 96168682 residues

Total number of hits satisfying chosen parameters: 283308

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR 76:.*
1: pir1.*
2: pir2.*
3: pir3.*
4: pir4.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	426	30.0	299	2 S56749	junctional adhesio
2	190.5	13.4	365	2 JC7780	coxsackie- and ade
3	186	13.1	811	2 A41054	fasciclin II, tran
4	186	13.1	873	2 B41054	fasciclin II PI-I
5	171	12.1	6642	2 T29757	protein UNC-89 - C
6	163.5	11.5	7962	2 I38346	elastic titin - hu
7	160.5	11.3	1367	2 A41228	protein-tyrosine k
8	157	11.1	344	2 A27681	nonspecific cross-
9	157	11.1	860	2 JC5702	ErbB kinase activa
10	157	11.1	868	2 JC5701	ErbB kinase activa
11	155.5	11.0	1328	2 T23007	hypothetical prote
12	155.5	11.0	2783	2 T34416	hypothetical prote
13	155	10.9	725	2 JE0100	neural cell adhesi
14	155	10.9	850	2 JC5700	ErbB kinase activa
15	153.5	10.8	521	2 JC1508	biliary glycoprote
16	152	10.7	773	2 T46283	hypothetical prote
17	152	10.7	5175	2 T20992	hypothetical prote
18	152	10.7	5198	2 T43290	hemectin precurs
19	151.5	10.7	1033	2 S19247	cell adhesion prot
20	151	10.6	1092	1 JN0635	neural cell adhesi
21	151	10.6	1501	2 I58148	protein-tyrosine-p
22	151	10.6	1863	2 S46217	protein-tyrosine-p
23	150.5	10.6	521	2 S34338	biliary glycoprote
24	150	10.6	1499	2 I50212	protein-tyrosine-p
25	150	10.6	1907	2 S50893	protein-tyrosine-p
26	148.5	10.5	519	2 A44783	ecto-ATPase precu
27	148	10.4	725	2 JE0099	neural cell adhesi
28	148	10.4	1088	1 IJCHNL	neural cell adhesi
29	148	10.4	1277	2 T30532	neural cell adhesi

30	147.5	10.4	1091	1 IJCHNL	neural cell adhesi
31	147.5	10.4	4162	2 T42633	connectin/titin -
32	147	10.4	417	2 JH0394	biliary glycoprote
33	147	10.4	464	2 C30127	transmembrane carc
34	147	10.4	526	1 A32164	biliary glycoprote
35	147	10.4	1897	1 T2HULK	leukocyte antigen-
36	146.5	10.3	458	1 WMSR1	biliary glycoprote
37	146.5	10.3	761	1 IJHUNG	neural cell adhesi
38	146	10.3	1051	2 A39712	kinase-like protei
39	145	10.2	333	2 A31923	amalgam protein pr
40	144.5	10.2	349	2 A34815	carcinoembryonic a
41	144.5	10.2	352	2 T33433	hypothetical prote
42	144.5	10.2	423	2 T29549	hypothetical prote
43	144.5	10.2	1273	2 T42405	sax-3 protein - Ca
44	144	10.2	1239	1 A32579	neuroglian - fruit
45	144	10.2	4391	2 A38096	perlecan precursor

ALIGNMENTS

RESULT 1
S56749

junctional adhesion molecule precursor - human
N:Alternate names: F11 platelet antigen; platelet adhesion molecule PAM-1; platelet F11
C:Species: Homo sapiens (man)
C>Date: 27-Oct-1995 #sequence_revision 01-Feb-2002 #text_change 01-Feb-2002
R:Accession: A59406; S56749
R:Ozaki, H.; Ishii, K.; Horiuchi, H.; Arai, H.; Kawamoto, T.; Okawa, K.; Iwamatsu, A.; I
J. Immunol. 163, 553-557, 1999
A:Title: Cutting edge: combined treatment of TNF-alpha and IFN-gamma causes redistribut
A:Reference number: A59406; MUID:99323940; PMID:10395639
A:Accession: A59406
A>Status: preliminary
A:Molecule type: DNA
A:Residues: 1-299 <OZA>
A:Cross-references: GB:AA42050; NID:G5326797; PIDN:AAD42050.1
R:Naik, U.P.; Ehrlich, Y.H.; Kornecki, E.
Biochem. J. 310, 155-162, 1995
A:Title: Mechanisms of platelet activation by a stimulatory antibody: cross-linking of
A:Reference number: S56749; MUID:95374438; PMID:7646439
A:Accession: S56749
A:Molecule type: protein
A:Residues: 28-49, 'X', 51-53, 62-73, 'E', 75-103, 123, 'F', 125-130, 'F', 'DKDKTYILNXY', 'LT', 206, 'X'
A>Note: the order of the peptides other than the amino terminus was not determined
C:Genetics:
A:Gene: JAM
C:Keywords: glycoprotein; phosphoprotein; platelet aggregation; platelet membrane
F:1-25/Domain: signal sequence #status predicted <SIG>
F:26-299/Product: junctional adhesion molecule #status predicted <MAT>

Query Match	30.0%;	Score 426;	DB 2;	Length 299;
Best Local Similarity	35.6%;	Pred. No. 1.4e-26;		
Matches	100;	Conservative 42;	Mismatches 99;	Indels 40; Gaps 7;
QY	4	AY-GFSAPKDDQVVAVXVQAEAILACKTKPKTVXSLEWK-KLGRSVSFVYYQDTLQGD	61	
Db	51	AYSGFSSP-----RVENKFDQDTRLLVCYNNKITASY	83	
QY	62	KRAEMIDFNIRIKNVRSDACKYCEVSAPSEQONLEEDTVLEVLVAPVPSCEVPS	121	
Db	84	EDRVTFPLPGITFKSVTRDGTGTCMWS--BEGGNSYGEVKVKKLVLPSPSKPTYNIPS	141	
QY	122	SALSGTGVVELRCQDEGNPAPYTWFKGIRLLENPLGSSQTSNSSYTWNTKTGTLQFNT	181	
Db	142	SATIGNRAVLTCSEQDGPSPSEYTWFKDGIWMTNPKSTRAFSSNSYVLNPTTGELVFPD	201	
QY	182	VSKLDTGEYSCBARNVGVRRCPGK-RMQVDLNLISGIIAAVWVVALVISVCGLVGYCAQ	240	
Db	202	LSASDTGEYSCBARNVGVRRCPGK-RMQVDLNLISGIIAAVWVVALVISVCGLVGYCAQ	240	
QY	241	RGYFSKETSFOKSNSSSKA-----TTMSENDPKHTKSFII	276	

Db 262 SRGHFDRT---KKGTSSKKVIYQPSARSEGEFKQTSSFLV 299

RESULT 2
JC7780
coxsaackie- and adenovirus receptor - bovine
C:Species: Bos primigenius taurus (cattle)
C:Date: 02-Apr-2002 #sequence_revision 02-Apr-2002 #text_change 02-Apr-2002
C:Accession: JC7780
R:Thoelen, I.; Keyaerts, E.; Lindberg, M.; Van Ranst, M.
Biochem. Biophys. Res. Commun. 288, 805-808, 2001
A:Title: Characterization of a cDNA encoding the bovine coxsackie and adenovirus receptor
A:Reference number: JC7780
A:Contents: Liver
A:Accession: JC7780
A:Molecule type: mRNA
A:Residues: 1-365 <THO>
A:Cross-references: GB:AY033651
C:Comment: This protein serves as the primary adenoviral attachment site on bovine cells

Query Match 13.4%; Score 190.5; DB 2; Length 365;
Best Local Similarity 24.1%; Pred. No. 1e-07;
Matches 73; Conservative 43; Mismatches 122; Indels 65; Gaps 11;

QY 6 GFSAPKQQVVTAVXYQEAAILACK---TPKTVXSRLEW-----KKL-----GRS 47
Db 19 GLSITTPQMIKAKGETAYLPCKFTLQEPDQGLDIEWLLSPADNQKVDQVILYSGDK 78
QY 48 VSFVYQOTLOGDFKNRAEMI-----DFNIRIKNVTSDAGKYRCEV-SAPSEGGQNL 99
Db 79 IYDDYYQ-----DLKGRVHFTSNDLKSGDASINVTNLQSLDGTGYQCKVKAPGVGNKKI 133
QY 100 EEDFTVTLVLVAPVPSCEVPSSALSSTVVELRCQEGNPAPEYTWFKDGIRLLENPRL 159
Db 134 Q-----LTVLKPGRGIRCYDGSBEIGNDFLKEPKEGSLPLRYEWOK-----LS 179
QY 160 GSQSTNSGYTNTKGTGLQFNTVSKLDTGEYSCEARNVGYRRC-----PKRQMVD 211
Db 180 DSQKLPTSWLPMTSPVSVKNSAEYSGTYTCTVRNRVSGDQCLLLRLDVLVPPSRACTI 239
QY 212 DLNLSGLIAAVVVALVISVCLGVCAVQAKRGYFSKETSFO-----KSNSSSKATTM 263
Db 240 AGAVIGTLALVLIALIVFCCH-----KKREEKEVEVHHDIREDVPPPKSRTSTARSYI 295

QY 264 SEN 266
Db 296 GSN 298

RESULT 3
A41054
fasciclin II, transmembrane splice form precursor - fruit fly (Drosophila melanogaster)
C:Species: Drosophila melanogaster
C:Date: 21-Apr-1992 #sequence_revision 21-Apr-1992 #text_change 17-Mar-2000
C:Accession: A41054
R:Grenningloh, G.; Rehm, E.J.; Goodman, C.S.
Cell 67, 45-57, 1991
A:Title: Genetic analysis of growth cone guidance in Drosophila: fasciclin II functions
A:Reference number: A41054; MUID:92005695; PMID:1913818
A:Accession: A41054
A>Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-811 <GRE>
A:Cross-references: GB:M77165; NID:g157402; PID:g157403
C:Gene: FlyBase: Fasn
A:Cross-references: FlyBase: FBgn0000635
C:Superfamily: neural cell adhesion molecule; fibronectin type III repeat homology; imm
C:Keywords: membrane protein

Query Match 13.1%; Score 186; DB 2; Length 811;
Best Local Similarity 24.6%; Pred. No. 6.2e-07;
Matches 67; Conservative 50; Mismatches 101; Indels 54; Gaps 13;

QY 8 SAPKDDQVVTAVXYQEAAILACKT---PKKTVXSRLEWKKLG---RSVSFVYVYQOTLOGDF 61
Db 142 NAPENQYPTLG---QDYVVMCEVKADNPNTI---DMLRNGDPRTTNDKTVVQT----- 189

QY 62 KNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSGQGNLEEDTVTLEVLVAPVPSCEVPS 121
Db 190 -----NGLLRNVQESDEGIYTCR-AAVETGELLER-TIRVEVFIQPEIISLPTNL 239

QY 122 SALSSTVVELRCQEGNPAPEYTWFKDGIRLLENPLGSSQSTNSSTYTMNTKTGLQFNT 181
Db 240 EAVEGKPPFAANCTAR-GKPVPEISWIRDATQL-----NVATADRFOVNPQTGLVTISS 291

QY 182 VSKLDTGEYSCEARNVGYRRCPGK-----RMQVDDL-NISGLIAAVVVALVISVCLG 235
Db 292 VSQDDYGTGTCTLAKNRAGVVDQKTKLNLVLRPQIYELYNVTGARTKEIAI----- 341

QY 236 VCYAQRKGYFSKETSFOKSNSSSKATTMSND 267
Db 342 TCRA--KGRPAPAITFRWGTQBEYTNQGGDD 371

RESULT 5
T23757
protein UNC-89 - Caenorhabditis elegans
C:Species: Caenorhabditis elegans
C:Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 03-Dec-1999

QY 8 SAPKDDQVVTAVXYQEAAILACKT---PKKTVXSRLEWKKLG---RSVSFVYVYQOTLOGDF 61
Db 142 NAPENQYPTLG---QDYVVMCEVKADNPNTI---DMLRNGDPRTTNDKTVVQT----- 189

QY 62 KNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSGQGNLEEDTVTLEVLVAPVPSCEVPS 121
Db 190 -----NGLLRNVQESDEGIYTCR-AAVETGELLER-TIRVEVFIQPEIISLPTNL 239

QY 122 SALSSTVVELRCQEGNPAPEYTWFKDGIRLLENPLGSSQSTNSSTYTMNTKTGLQFNT 181
Db 240 EAVEGKPPFAANCTAR-GKPVPEISWIRDATQL-----NVATADRFOVNPQTGLVTISS 291

QY 182 VSKLDTGEYSCEARNVGYRRCPGK-----RMQVDDL-NISGLIAAVVVALVISVCLG 235
Db 292 VSQDDYGTGTCTLAKNRAGVVDQKTKLNLVLRPQIYELYNVTGARTKEIAI----- 341

QY 236 VCYAQRKGYFSKETSFOKSNSSSKATTMSND 267
Db 342 TCRA--KGRPAPAITFRWGTQBEYTNQGGDD 371

RESULT 4
B41054
fasciclin II PI-linked splice form precursor - fruit fly (Drosophila melanogaster)
C:Species: Drosophila melanogaster
C:Date: 21-Apr-1992 #sequence_revision 21-Apr-1992 #text_change 17-Mar-2000
C:Accession: B41054
R:Grenningloh, G.; Rehm, E.J.; Goodman, C.S.
Cell 67, 45-57, 1991
A:Title: Genetic analysis of growth cone guidance in Drosophila: fasciclin II functions
A:Reference number: A41054; MUID:92005695; PMID:1913818
A:Accession: B41054
A>Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-873 <GRE>
A:Cross-references: GB:M77166
C:Gene: FlyBase: Fasn
A:Cross-references: FlyBase: FBgn0000635
C:Superfamily: neural cell adhesion molecule; fibronectin type III repeat homology; imm
C:Keywords: transmembrane protein

Query Match 13.1%; Score 186; DB 2; Length 873;
Best Local Similarity 24.6%; Pred. No. 6.7e-07;
Matches 67; Conservative 50; Mismatches 101; Indels 54; Gaps 13;

QY 8 SAPKDDQVVTAVXYQEAAILACKT---PKKTVXSRLEWKKLG---RSVSFVYVYQOTLOGDF 61
Db 142 NAPENQYPTLG---QDYVVMCEVKADNPNTI---DMLRNGDPRTTNDKTVVQT----- 189

QY 62 KNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSGQGNLEEDTVTLEVLVAPVPSCEVPS 121
Db 190 -----NGLLRNVQESDEGIYTCR-AAVETGELLER-TIRVEVFIQPEIISLPTNL 239

QY 122 SALSSTVVELRCQEGNPAPEYTWFKDGIRLLENPLGSSQSTNSSTYTMNTKTGLQFNT 181
Db 240 EAVEGKPPFAANCTAR-GKPVPEISWIRDATQL-----NVATADRFOVNPQTGLVTISS 291

QY 182 VSKLDTGEYSCEARNVGYRRCPGK-----RMQVDDL-NISGLIAAVVVALVISVCLG 235
Db 292 VSQDDYGTGTCTLAKNRAGVVDQKTKLNLVLRPQIYELYNVTGARTKEIAI----- 341

QY 236 VCYAQRKGYFSKETSFOKSNSSSKATTMSND 267
Db 342 TCRA--KGRPAPAITFRWGTQBEYTNQGGDD 371

C;Accession: T29757
R;Du, Z.; Le, T.T.; Wilson, R.
submitted to the EMBL Data Library, May 1997
A;Description: The sequence of C. elegans cosmid C09D1.
A;Reference number: Z20679
A;Accession: T29757
A;Status: preliminary; translated from GB/EMBL/DBJ
A;Molecule type: DNA
A;Residues: 1-6642 <DUZ>
A;Cross-references: EMBL:AF003131; PIDN:AB54132.1; GSPDB:GN00019; CESP:unc-89
A;Experimental source: strain Bristol N2; clone C09D1
C;Genetics:
A;Gene: CESP:unc-89
A;Map position: 1
A;Introns: 17/2; 108/3; 154/2; 211/2; 265/3; 326/2; 326/3; 426/2; 454/1; 500/1; 537/1; 606/1
/3; 5917/1; 6027/1; 6061/3; 6153/2; 6515/1; 6552/3; 6609/1

Query Match 12.1%; Score 171; DB 2; Length 6642;
Best Local Similarity 28.1%; Pred. No. 0.00012;
Matches 61; Conservative 29; Mismatches 75; Indels 52; Gaps 11;

QY 6 GFSAPEKQDVV---TAVXQEAILACKTPKTKVKSRLKWKLGSRVSFVYQTLQGDFFK 62
Db 3823 GRGAPEFVELRSCVTVEKQAILKCKV-KQEPKPKIKWTKGKEVEM-----SAR 3872
QY 63 NRAEMID---FNIRIKNVTSDAGKYRCEVSAPSEQONLEEDTVTLVLVAPVAPSCV 119
Db 3873 VRAEHKDDGTLTLTFDNTVQADAGEYRCE--AENEYGSANTGEPPIIVTLGAPKIDG-EA 3929
QY 120 P-----SSALSGTGVVELRCODKGNPAPEYTWFKDGIIRLLENPRLGQSQT 164
Db 3930 PDFLPQVPKPAVVTVGETAVLEGKI-----SGKPKPSVKYKNGBELKPSDRVKIE-- 3979
QY 165 NSSYTWNTKGTGLQFN-TVSKL-DTGRYSCEARNSVG 199
Db 3980 -----NLDDGTORLTVNAKLDDMDYRCEASNEFG 4010

RESULT 6
I38346
elastic titin - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 29-May-1998 #sequence_revision 29-May-1998 #text_change 21-Jul-2000
C;Accession: I38346
R;Labeit, S.; Kolmerer, B.
Science 270, 293-296, 1995
A;Title: Titins: giant proteins in charge of muscle ultrastructure and elasticity.
A;Reference number: A57430; MUID:96026330; PMID:7569978
A;Accession: I38346
A;Status: preliminary; translated from GB/EMBL/DBJ
A;Molecule type: mRNA
A;Residues: 1-7962 <RES>
A;Cross-references: EMBL:X90569; NID:g1017426; PIDN:CAA62189.1; PID:g1017427
A;Gene: GDB:TTN
A;Cross-references: GDB:127867; OMIM:188840
A;Map position: 2q31-2q31

Query Match 11.5%; Score 163.5; DB 2; Length 7962;
Best Local Similarity 28.3%; Pred. No. 0.00058;
Matches 53; Conservative 30; Mismatches 65; Indels 39; Gaps 7;

QY 23 EAILACKTPKTKVKSRLKWKLGSRV-----SFVYQTLQGDFFKRAEMIDFNIRIKN 76
Db 2666 KSIILESTVTGLTPISVTWKQDGNITTEKCNIVTTEKC-----ILEILN 2712
QY 77 VTRSDAGKYRCEVSAPSEQONLEEDTVTLVLVAPVAPSCV-----PSSALSGTGVVELR 132
Db 2713 STKRDAQGYSCRIE--NEAGRDV-----CGALVSTLEPPYFVTEPLEAAVGDSVSLQ 2764
QY 133 CODKGNPAPEYTWFKDGIIRLLENPRLGQSQTSSNTWTKTGTGLQFNVTYKLDGTGEYSC 192
Db 2765 CQ-VAGTPEITVSWYKGTDLKRLPTPEYRTFTNN-----VATLVFNKVNINDSGEYTC 2816

QY 193 EARNSVG 199
Db 2817 KAENSIG 2823

RESULT 7
A41228
Protein-tyrosine kinase (EC 2.7.1.112) Flk-1 precursor, endothelial cell-specific receptor
C;Species: Mus musculus (house mouse)
C;Date: 19-Jun-1992 #sequence_revision 19-Jun-1992 #text_change 04-Feb-2000
C;Accession: A41228; A46065; I58365; S18832; S29991
R;Matthews, W.; Jordan, C.T.; Gavin, M.; Jenkins, N.A.; Copeland, N.G.; Lemischka, I.R.
Proc. Natl. Acad. Sci. U.S.A. 88, 9036-9039, 1991
A;Title: A receptor tyrosine kinase cDNA isolated from a population of enriched primitive
A;Reference number: A41228; MUID:92020984; PMID:1717995
A;Accession: A41228
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-1367 <MAT>
A;Cross-references: GB:X59397; NID:950976; PIDN:CAA42040.1; PID:g50977
R;Millaue, B.; Witzigmann-Voos, S.; Schunrich, H.; Martinez, R.; Moller, N.P.; Risau, W.
Cell 72, 835-846, 1993
A;Title: High affinity VEGF binding and developmental expression suggest Flk-1 as a major
A;Reference number: A46065; MUID:93208880; PMID:7681362
A;Accession: A46065
A;Status: preliminary; not compared with conceptual translation
A;Molecule type: mRNA
A;Residues: 1-24,'T',26-782,'VL',785-916,'C',918-1367 <MIL>
A;Cross-references: GB:X70842; NID:957923; PIDN:CAA50192.1; PID:g57924
A;Note: submitted to the EMBL Data Library, January 1993
A;Note: sequence extracted from NCBI backbone (NCBI:P:128064)
R;Oelrichs, R.B.; Reid, H.H.; Bernard, O.; Ziemlecki, A.; Wilks, A.F.
Oncogene 8, 11-18, 1993
A;Title: NYK/FLK-1: a putative receptor protein tyrosine kinase isolated from E10 embryo
A;Reference number: I58365; MUID:93141255; PMID:8423988
A;Accession: I58365
A;Status: preliminary; translated from GB/EMBL/DBJ
A;Molecule type: mRNA
A;Residues: 1-678,'D',680-1340,'RSPV' <OEL>
A;Cross-references: GB:S53103; NID:9264004; PIDN:AAB25043.1; PID:g264005
C;Genetics:
A;Gene: FLK-1; NYK
C;Superfamily: unassigned Ser/Thr or Tyr-specific protein kinases; protein kinase homolog
C;Keywords: ATP; autophosphorylation; phosphoprotein; phosphotransferase; transmembrane
F;830-1165/Domain: protein kinase homology <KIN>
F;838-846/Region: protein kinase ATP-binding motif

Query Match 11.3%; Score 160.5; DB 2; Length 1367;
Best Local Similarity 24.8%; Pred. No. 0.00012;
Matches 53; Conservative 23; Mismatches 75; Indels 63; Gaps 6;

QY 22 QEAILACKTPKTKVKSRLKWKLGSRVSFVYQTLQGDFFKRAEMIDFN----- 71
Db 562 QESVSLCTADRNTFENLTWYKLGSAQTSVHMGESLTPVCKNLDALWKLNGTWFNSSTND 621
QY 72 ----IRKNVTRSDAGKYRC-----EVSAPSEQONLEEDTVTLV 108
Db 622 ILIVAFQNASLQDQGDYVCSAQDKTKRHLVKQLIILERMAMITG-NLENQTTI-- 678
QY 109 LVAPVAPSCVPSALSSTGVTVLRCQDKEGNPAPEYTWFKDGIIRLLENPRLGQSQTSSSY 168
Db 679 -----GETIEVTC-PASGNPTPHITWFKDNETLVDSGIVLRDGNRL 720
QY 169 TMTKTGTGLQFNVTYKLDGTGEYSCEARNSVGYRR 202
Db 721 TI-----RRVKEDGGLYTCQACNVLGAR 745

RESULT 8
A27681
nonspecific cross-reacting antigen precursor - human
N;Alternate names: NCA; TEX/NCA

C;Species: Homo sapiens (man)
 C;Date: 31-Mar-1989 #sequence revision 16-Sep-1992 #text change 11-Jan-2000
 C;Accession: A26902; A29875; A27681; B31037; A29318; A27709; A36271; C26414; E44476; F4476
 R;Oikawa, S.; Kosaki, G.; Nakazato, H.
 Biochem. Biophys. Res. Commun. 146, 464-469, 1987
 A;Title: Molecular cloning of a gene for a member of carcinoembryonic antigen (CEA) gene
 A;Reference number: A26902; MUID: 87298464; PMID: 36119891
 A;Accession: A26902
 A;Molecule type: DNA
 A;Residues: 1-141 <OIK>
 A;Cross-references: GB:M17082; NID: g180230; PIDN: AAA51971.1; PID: g553222
 R;Thompson, J.A.; Pande, H.; Paxton, R.J.; Shively, L.; Padma, A.; Simmer, R.L.; Todd, C.
 Proc. Natl. Acad. Sci. U.S.A. 84, 2965-2969, 1987
 A;Title: Molecular cloning of a gene belonging to the carcinoembryonic antigen gene family
 A;Reference number: A29875; MUID: 87204248; PMID: 3033672
 A;Accession: A29875
 A;Molecule type: DNA
 A;Residues: 23-141 <THO>
 A;Cross-references: GB:M16337
 A;Note: the authors translated the codon ACT for residue 64 as Tyr
 R;Tawaragi, Y.; Oikawa, S.; Matsumoto, Y.; Kozaki, G.; Nakazato, H.
 Biochem. Biophys. Res. Commun. 150, 89-96, 1988
 A;Title: Primary structure of nonspecific crossreacting antigen (NCA), a member of carcinoembryonic antigen family
 A;Reference number: A27681; MUID: 88106638; PMID: 3337731
 A;Accession: A27681
 A;Molecule type: mRNA
 A;Residues: 1-238, 'V', 240-344 <TAW>
 A;Cross-references: GB:M18728; NID: g189084; PIDN: AAA59907.1; PID: g189085
 R;Barnett, T.; Goebel, S.J.; Nothdurft, M.A.; Elting, J.J.
 Genomics 3, 59-66, 1988
 A;Title: Carcinoembryonic antigen family: characterization of cDNAs coding for NCA and CEA
 A;Reference number: A31037; MUID: 89122014; PMID: 3220478
 A;Accession: B31037
 A;Molecule type: mRNA
 A;Residues: 1-137, 'L', 139-344 <BAR>
 A;Cross-references: GB:M29541; NID: g189103; PIDN: AAA59915.1; PID: g189104
 A;Note: the authors translated the codon TTG for residue 138 as Phe
 R;Neumaier, M.; Zimmermann, W.; Shively, L.; Hinoda, Y.; Riggs, A.D.; Shively, J.E.
 J. Biol. Chem. 263, 3202-3207, 1988
 A;Title: Characterization of a cDNA clone for the nonspecific cross-reacting antigen (NCA)
 A;Reference number: A29918; MUID: 88139389; PMID: 2830274
 A;Accession: A29918
 A;Molecule type: mRNA
 A;Residues: 1-344 <NEU>
 A;Cross-references: GB:M18216; GB: J03550; NID: g178690; PIDN: AAA51739.1; PID: g178691
 R;Grunert, F.; Kolbinger, F.; Schwarz, K.; Schwaiblmair, H.; von Kleist, S.
 Biochem. Biophys. Res. Commun. 153, 1105-1115, 1988
 A;Title: Protein analysis of NCA-50 shows identity to NCA cDNA deduced sequences and indicates that NCA-50 is a member of the carcinoembryonic antigen family
 A;Reference number: A27709; MUID: 88268882; PMID: 3390172
 A;Accession: A27709
 A;Molecule type: protein
 A;Residues: 35-95; 99-120; 123-138; 149-151, 'X', 153-162; 166, 'X', 168-172, 'X', 174-193; 231-235
 R;Hefta, S.A.; Paxton, R.J.; Shively, J.E.
 J. Biol. Chem. 265, 8618-8626, 1990
 A;Title: Sequence and glycosylation site identity of two distinct glycoforms of nonspecific cross-reacting antigen (NCA)
 A;Reference number: A36271; MUID: 90256782; PMID: 2341397
 A;Accession: A36271
 A;Molecule type: protein
 A;Residues: 35-42; 44-53; 55-80; 83-134; 139-160; 166-172; 174-180; 191-194; 204-224; 233-308; 310-314
 R;Paxton, R.J.; Mooser, G.; Pande, H.; Lee, T.D.; Shively, J.E.
 Proc. Natl. Acad. Sci. U.S.A. 84, 920-924, 1987
 A;Title: Sequence analysis of carcinoembryonic antigen: identification of glycosylation sites
 A;Reference number: A26414; MUID: 87147209; PMID: 3469650
 A;Accession: C26414
 A;Molecule type: protein
 A;Residues: 35-69 <PAX>
 R;Khan, W.N.; Frangemyr, L.; Teglund, S.; Israelsson, A.; Bremer, K.; Hammarstrom, S.
 Genomics 14, 384-390, 1992
 A;Title: Identification of three new genes and estimation of the size of the carcinoembryonic antigen gene family
 A;Reference number: A44476; MUID: 93052339; PMID: 1427854
 A;Accession: B44476
 A;Status: preliminary; not compared with conceptual translation
 A;Molecule type: DNA

A;Residues: 35-141 <KHA>
 A;Accession: F44476
 A;Status: preliminary; not compared with conceptual translation
 A;Molecule type: DNA
 A;Residues: 35-137, 'L', 139-141 <KH2>
 C;Comment: This protein appears to be processed at the carboxyl terminus and anchored to the membrane
 C;Genetics:
 A;Gene: GDB:NCA
 A;Cross-references: GDB:120221; OMIM:163980
 A;Map position: 19q13.2-19q13.2
 A;Introns: 22/1
 A;Note: the list of introns may be incomplete
 C;Superfamily: carcinoembryonic antigen; carcinoembryonic antigen precursor amino-terminal
 C;Keywords: blocked carboxyl end; glycoprotein; lipoprotein; membrane protein; phosphatidylcholine
 F;1-138/Domain: carcinoembryonic antigen precursor amino-terminal homology <CEAN>
 F;1-34/Domain: signal sequence #status predicted <SIG>
 F;35-320/Product: nonspecific cross-reacting antigen #status experimental <MAT>
 F;160-217/Domain: immunoglobulin homology <IMM2>
 F;252-301/Domain: immunoglobulin homology <IMM2>
 F;321-344/Domain: carboxyl-terminal propeptide #status predicted <CTP>
 F;104,111,115,152,173,197,224,256,274,288,292/Binding site: carbohydrate (Asn) (covalent)
 F;303/Binding site: carbohydrate (Asn) (covalent) #status predicted
 F;320/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Gly) (in mature form)
 Query Match 11.1%; Score 157; DB 2; Length 344;
 Best Local Similarity 28.4%; Pred No. 4.6e-05;
 Matches 48; Conservative 25; Mismatches 62; Indels 34; Gaps 8;
 QY 69 DFNIRKNVTRSDAGKYRCEVSAPSEQQNLDEDTVLELVAPVAPVCEVPSSA--LSG 126
 Db NMTLLSVKRNDA3VECEIQNPASNR--DPVTNLVLYGPDGPIS-PSKANYRPG 252
 QY 127 TVVELRCQKGNPAPRYTFKQIRLLENPRLSQSTNSSTYNTYKTGTLQFTVSKLD 186
 Db ENLNLSC--AASNPAPQYSWFING-----TFQSTQELFIPNITVNN 293
 QY 187 TGEYSCCARNSVGRRCFG-KRMQVDDNLISG---IIAAVVVVALVLSV 231
 Db SGVYMCQAHNS-----ATGLNRTVTMTVSGSNAPVLSAVATVGITGV 337
 RESULT 9
 JC5702
 ErbB kinase activator alpha2a, brain and thymus - rat
 C;Species: Rattus norvegicus (Norway rat)
 C;Date: 25-Nov-1997 #sequence revision 25-Nov-1997 #text change 08-Sep-2002
 C;Accession: JC5702; PC4417
 R;Higashiyama, S.; Horikawa, M.; Yamada, K.; Ichino, N.; Nakano, N.; Nakagawa, T.; Miya, J.
 Biochem. J. 222, 675-680, 1997
 A;Title: A novel brain-derived member of the epidermal growth factor family that interacts with ErbB kinase
 A;Reference number: JC5700; MUID: 98006324; PMID: 9348101
 A;Accession: JC5702
 A;Status: nucleic acid sequence not shown
 A;Molecule type: mRNA
 A;Residues: 1-860 <HIG>
 A;Experimental source: PC-12 cell
 A;Accession: PC4417
 A;Status: nucleic acid sequence not shown
 A;Molecule type: mRNA
 A;Residues: 'P', 212-213, 223-860 <HI2>
 A;Cross-references: DDBJ:AB001576; NID: g2605478; PIDN: BAA23348.1; PID: g2605479
 A;Experimental source: PC-12 cell
 C;Comment: This protein is a member of the epidermal growth factor family. It is functional in the differentiation of MDA-MB-453 cells.
 C;Superfamily: human ErbB kinase activator alpha, brain and thymus; EGF homology; immunoglobulin
 C;Keywords: glycoprotein
 F;274-327/Domain: IG-like #status predicted <IGL>
 F;361-397/Domain: EGF homology <EGF>
 F;422-444/Domain: hydrophobic #status predicted <HYD>
 F;163,294,467/Binding site: carbohydrate (Asn) (covalent) #status predicted
 Query Match 11.1%; Score 157; DB 2; Length 860;

```
Best Local Similarity 27.7%; Pred. No. 0.00014;
Matches 56; Conservative 24; Mismatches 86; Indels 36; Gaps 8;

QY 44 LGRSVFVYQOTLQGD--FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQNLEE 101
Db 204 LERNQRYIFFLEPTQPLVFKTAFAPVDPN--GKNI-KKEVGKILCTDCATRPKLKMKMS 260

QY 102 DTVTILEVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGS 161
Db 261 QTGEV-----GEKQSLKCEAAGNQPQSYRWPFGKGKELNR-----S 296

QY 162 QSTNSSYTNTKGTQLQFNVTSLKDTGEYSCERNVGVYRCPGKRMQVDDLNI-----S 216
Db 297 RDRIKYGNGRKNRSLQFNKVKVEDAGEYVCEAEINILGKDTVRG-RLHVNVSVTLLSSWS 355

QY 217 GIIAAVVVVALVISVCGLGVCY 238
Db 356 GHARKCNETAKSYCVNG-GVCY 376

RESULT 10
JC5701
Erbb kinase activator alpha1, brain and thymus - rat
C:Species: Rattus norvegicus (Norway rat)
C:Date: 25-Nov-1997 #sequence_revision 25-Nov-1997 #text_change 08-Sep-2002
C:Accession: JC5701; PC4411
R:Higashiyama, S.; Horikawa, M.; Yamada, K.; Ichino, N.; Nakano, N.; Nakagawa, T.; Miyaguchi, J. Biochem. 122, 675-680, 1997
A:Title: A novel brain-derived member of the epidermal growth factor family that interacts with ErbB-2
A:Reference number: JC5700; MUID:98006324; PMID:9348101
A:Accession: JC5701
A:Molecule type: mRNA
A:Residues: 1-868 <H12>
A:Cross-references: DDBJ:D89995; NID:g2605629; PIDN:BAAX3344.1; PID:g2605630
A:Accession: PC4411
A:Molecule type: protein
A:Residues: 128-162 <H12>
A:Experimental source: PC-12 cell
A:Comment: This protein is a member of the epidermal growth factor family. It is functioning in the differentiation of MDA-MB-453 cells.
C:Superfamily: human ErbB kinase activator alpha, brain and thymus; EGF homology; immunoglobulin-like domain
F:361-397/Domain: EGF homology <EGF>

Query Match 11.1%; Score 157; DB 2; Length 868;
Best Local Similarity 27.7%; Pred. No. 0.00014;
Matches 56; Conservative 24; Mismatches 86; Indels 36; Gaps 8;

QY 44 LGRSVFVYQOTLQGD--FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQNLEE 101
Db 204 LERNQRYIFFLEPTQPLVFKTAFAPVDPN--GKNI-KKEVGKILCTDCATRPKLKMKMS 260

QY 102 DTVTILEVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGS 161
Db 261 QTGEV-----GEKQSLKCEAAGNQPQSYRWPFGKGKELNR-----S 296

QY 162 QSTNSSYTNTKGTQLQFNVTSLKDTGEYSCERNVGVYRCPGKRMQVDDLNI-----S 216
Db 297 RDRIKYGNGRKNRSLQFNKVKVEDAGEYVCEAEINILGKDTVRG-RLHVNVSVTLLSSWS 355

QY 217 GIIAAVVVVALVISVCGLGVCY 238
Db 356 GHARKCNETAKSYCVNG-GVCY 376

hypochemical protein K09C8.5 - Caenorhabditis elegans
C:Species: Caenorhabditis elegans
C:Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 18-Feb-2000
C:Accession: T23007; T23543
R:Kershaw, J.
submitted to the EMBL Data Library, November 1995
A:Reference number: Z19651
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A:Accession: T23007
A>Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 1-1328 <W12>
A:Cross-references: EMBL:Z68005; PIDN:CAA91994.1; GSPDB:GN00028; CESP:K09C8.5
A:Experimental source: clone F59F3
R:Kershaw, J.
submitted to the EMBL Data Library, November 1995
A:Reference number: Z19755
A:Accession: T23543
A>Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 1-1328 <W12>
A:Cross-references: EMBL:Z68006; PIDN:CAA91999.1; GSPDB:GN00028; CESP:K09C8.5
A:Experimental source: clone K09C8
C:Genetics:
A:Gene: CESP:K09C8.5
A:Map position: X
A:Introns: 34/1; 85/3; 133/3; 182/2; 220/3; 262/2; 390/3; 442/2; 493/3; 563/3; 586/3; 600/3; 649/3; 699/3; 749/3; 799/3; 849/3; 899/3; 949/3; 999/3; 1049/3; 1099/3; 1149/3; 1199/3; 1249/3; 1299/3; 1349/3; 1399/3; 1449/3; 1499/3; 1549/3; 1599/3; 1649/3; 1699/3; 1749/3; 1799/3; 1849/3; 1899/3; 1949/3; 1999/3; 2049/3; 2099/3; 2149/3; 2199/3; 2249/3; 2299/3; 2349/3; 2399/3; 2449/3; 2499/3; 2549/3; 2599/3; 2649/3; 2699/3; 2749/3; 2799/3; 2849/3; 2899/3; 2949/3; 2999/3; 3049/3; 3099/3; 3149/3; 3199/3; 3249/3; 3299/3; 3349/3; 3399/3; 3449/3; 3499/3; 3549/3; 3599/3; 3649/3; 3699/3; 3749/3; 3799/3; 3849/3; 3899/3; 3949/3; 3999/3; 4049/3; 4099/3; 4149/3; 4199/3; 4249/3; 4299/3; 4349/3; 4399/3; 4449/3; 4499/3; 4549/3; 4599/3; 4649/3; 4699/3; 4749/3; 4799/3; 4849/3; 4899/3; 4949/3; 4999/3; 5049/3; 5099/3; 5149/3; 5199/3; 5249/3; 5299/3; 5349/3; 5399/3; 5449/3; 5499/3; 5549/3; 5599/3; 5649/3; 5699/3; 5749/3; 5799/3; 5849/3; 5899/3; 5949/3; 5999/3; 6049/3; 6099/3; 6149/3; 6199/3; 6249/3; 6299/3; 6349/3; 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QY      221 AVVVVALVISV 231
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Db      2768 FSVVHLLISI 2778

RESULT 13
JE0100
neural cell adhesion molecule 2 - African clawed frog
N;Alternate names: N-CAM 2
C;Species: Xenopus laevis (African clawed frog)
C;Date: 19-May-1998 #sequence_revision 29-May-1998 #text_change 21-Jul-2000
C;Accession: JE0100
R;Kudo, M.; Takayama, E.; Tadakuma, T.; Shiokawa, K.
Biochem. Biophys. Res. Commun. 245, 127-132, 1998
A;Title: Molecular cloning of ssd-form neural cell adhesion molecules (N-CAMs) as the ma
A;Reference number: JE0099; MUID:98204770; PMID:9535795
A;Accession: JE0100
A;Molecule type: mRNA
A;Residues: 1-725 <KUD>
A;Cross-references: DDBJ:AB008163; NID:g3116228; PIDN:BAA25932.1; PID:g3116229
A;Experimental source: heart
C;Comment: This protein mediates and regulates various cell-cell interactions through bo
C;Superfamily: neural cell adhesion molecule; fibronectin type III repeat homology; immu
F;413-475/Domain: immunoglobulin homology <IMM>
F;512-589/Domain: fibronectin type III repeat homology <3FR>

Query Match      10.9%; Score 155; DB 2; Length 725;
Best Local Similarity 26.6%; Pred. No. 0.00016;
Matches 55; Conservative 37; Mismatches 99; Indels 16; Gaps 8;

QY      7 FSAPOQOV--VTAVYQEAAILACKTPKTKVXSRLKWKLGSRVSFVYVQOTLQSGDFKMR 64
      ::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||::
Db      300 YAKPKITYVENKTAVELDEITLTCEASGDPIPS-ITWRTAHRNIS--SEBKTLDGHIWVK 356

QY      65 AEMIDFNIRIKNVRSDAGKYRCEVSAPSEQGNLEEDTVTLVLVAPVPSCEVPSSAL 124
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Db      357 DHIRMSALTUKIQYTDAGDYFCVSNPI----GVDMQAMVFEVQYAPKIRG-PVVVYTW 411

QY      125 SGTVVELRCODEKGNPAPEYTWFKDGIIRLLENPRLGSSQTSNYSYTWNTKTGTLQFNVTSK 184
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Db      412 EGNPNVITC-DVLAHPSAAVSWFRDG-QLLPS----SNFSNIKIYNGPTFSSLEVNPDSE 465

QY      185 LDTGEYSCEARNVGYRRRCFGKRMQVD 211
      ||| |||:
Db      466 NDFGNYNCSAVNSIGHSSESEFILVQAD 492

RESULT 14
JC5700
ErbB Kinase activator alpha, brain and thymus - human
C;Species: Homo sapiens (man)
C;Date: 25-Nov-1997 #sequence_revision 25-Nov-1997 #text_change 08-Sep-2002
C;Accession: JC5700
R;Higashiyama, S.; Horikawa, M.; Yamada, K.; Ichino, N.; Nakano, N.; Nakagawa, T.; Miyag
J. Biochem. 122, 675-680, 1997
A;Title: A novel brain-derived member of the epidermal growth factor family that interac
A;Reference number: JC5700; MUID:98006324; PMID:9348101
A;Accession: JC5700
A;Status: nucleic acid sequence not shown
A;Molecule type: mRNA
A;Residues: 1-850 <HIG>
A;Cross-references: DDBJ:AB005060; NID:g2626738; PIDN:BAA23417.1; PID:g2626739
A;Experimental source: SK-NSH cell
C;Comment: This protein is a member of the epidermal growth factor family. It is functio
ating the differentiation of MDA-MB-453 cells.
C;Superfamily: human ErbB kinase activator alpha, brain and thymus; EGF homology; immu
C;Keywords: glycoprotein
F;258-311/Domain: Ig-like #status predicted <IGL>
F;346-381/Domain: EGF homology <EGF>
F;147,278,451/Binding site: carbohydrate (Asn) (covalent) #status predicted

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Query Match      10.9%; Score 155; DB 2; Length 850;
Best Local Similarity 27.7%; Pred. No. 0.00019;
Matches 56; Conservative 24; Mismatches 86; Indels 36; Gaps 8;

QY      44 LGRSVSFVYVQOTLQGD--FKNRAEMIDFNIRIKNVRSDAGKYRCEVSAPSEQGNLEE 101
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Db      188 LERNQRYIFPLEPTEQPLVFETAFLDTN--CKNL-KKEVGKILCTDCATRPKLKKWKS 244

QY      102 DTVTLEVLVAPVPSCEVPSSALSGTVVELRCODEKGNPAPEYTWFKDGIIRLLENPRLG 161
      ::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||::
Db      245 QTCQV-----GKQSLKCEAAAGNPQPSYRWFKDGKELNR-----S 280

QY      162 QSTNSSYTWNTKTGTLQFNVTSKLDTGEYSCEARNVGYRRRCFGKRMQVDDLANI-----S 216
      ::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||::
Db      281 RDRIKYGKGRKNRSLQFNKVKVEDAGEYVCEAEINILGKDTVRG-RLYVNSVSTTLSSWS 339

QY      217 GIITAAVVVALVISVCGLGVCY 238
      ||| |||:
Db      340 GHARKCNETAKSYCVNG-GVCY 360

RESULT 15
JC1508
biliary glycoprotein D - mouse
N;Alternate names: biliary glycoprotein 1
C;Species: Mus musculus (house mouse)
C;Date: 24-Feb-1994 #sequence_revision 24-Feb-1994 #text_change 23-Jul-1999
C;Accession: JC1508; S65940; S36852
R;McCuaign, K.; Rosenberg, M.; Nedellec, P.; Turbide, C.; Beauchemin, N.
Gene 127, 173-183, 1993
A;Title: Expression of the Bgp gene and characterization of mouse colon biliary glycop:
A;Reference number: JC1505; MUID:93273228; PMID:8500759
A;Accession: JC1508
A;Molecule type: mRNA
A;Residues: 1-521 <MCC>
A;Cross-references: EMBL:X67279; NID:g50170; PIDN:CAA47696.1; PID:g50171
A;Experimental source: strain CDI; tissue colon
R;Nedellec, P.; Turbide, C.; Beauchemin, N.
Eur. J. Biochem. 231, 104-114, 1995
A;Title: Characterization and transcriptional activity of the mouse biliary glycoprote:
A;Reference number: S65939; MUID:95354678; PMID:7628460
A;Accession: S65940
A;Status: translation not shown
A;Molecule type: DNA
A;Residues: 1-21 <NED>
A;Cross-references: EMBL:X84054; NID:g1039337
A;Experimental source: strain BALB/c
A;Note: the nucleotide sequence was submitted to the EMBL Data Library, July 1992
A;Note: only a part of the coding sequence is given
C;Comment: This protein is expressed at the cell surface and plays a determinant role :
C;Genetics:
A;Gene: Bgpd; bgp1
A;Map position: 7
C;Superfamily: carcinoembryonic antigen; carcinoembryonic antigen precursor amino-term:
C;Keywords: glycoprotein; receptor; transmembrane protein
F;1-138/Domain: carcinoembryonic antigen precursor amino-terminal homology <CEAN>
F;160-219/Domain: immunoglobulin homology <IMM1>
F;254-303/Domain: immunoglobulin homology <IMM2>
F;339-396/Domain: immunoglobulin homology <IMM3>
F;71,89,104,148,199,206,210,226,258,290,294,304,317,333,375/Binding site: carbohydrate

Query Match      10.8%; Score 153.5; DB 2; Length 521;
Best Local Similarity 21.9%; Pred. No. 0.00014;
Matches 70; Conservative 37; Mismatches 93; Indels 119; Gaps 14;

QY      41 WKKGRSVSFVYVQOTLQGDQFNRAEMIDFN--IRIKNVRSDAGKYRCEVSAPSEQGN 98
      |||::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||::
Db      180 WSRNGESLS-----EGD---RLKLGSEGNRTLLNVRNDTGPYVCETNPVSVNRS 228

QY      99 LEEDTVTLVLVAPVPSCEVPSSAL--SGTVVELRCODEKGNPAPEYTWFKDGIIRLLEN 156
      ::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||::
Db      229 ---DPFSLNIIYGPDTPIIS-PSDIYLPFGSNLNSCH-AASNPPAQYFWL-----INBK 278

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QY	157	PRLGSO-----STNSS-----YTMNTKITG-----	175
Db	279	PHASSOELFIPNITTTNNSGTYTCFVANSVTGLSRTTVKNTVLEPVTPQPLQVTNTTVKE	338
QY	176	-----TLQFNTVSKLDTGEYSCEARN	196
Db	339	LDSVTLTCLSLNDIGANIQWLFNSQSLQLTERMTLSQNNLSILRIDPIKREDAGEYQCEISN	398
QY	197	SVCYRRCPGKMQV-----DDLNIISGIIAAVVVVALVISVCGLGVCYAQRKGYSK	247
Db	399	PVSRRRSNSIKLDIIFDPTQGGLSGDAIAGIV--IGVVAGVALIAGLAYFLYSRK---SG	453
QY	248	ETSFQKSNSSSKATTMSN	266
Db	454	GGSDQRDLTEHKPSTSNHN	472

Search completed: December 9, 2003, 17:13:42
Job time : 14.9443 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:08:11 ; Search time 9.13589 Seconds
(without alignments)
1420.702 Million cell updates/sec

Title: US-09-852-797-76_COPY_23_298

Perfect score: 1418

Sequence: 1 YHKAYGFSAPKQQQVTVAVX.....SSKATTMSDNFKHTKSFII 276

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 127863 seqs, 47026705 residues

Total number of hits satisfying chosen parameters: 127863

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : SwissProt_41.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1415	99.8	298	1	JAM2_HUMAN
2	426	30.0	299	1	JAM1_HUMAN
3	414.5	29.2	298	1	JAM1_BOVIN
4	410	28.9	300	1	JAM1_MOUSE
5	231	16.3	319	1	A33_HUMAN
6	190.5	13.4	365	1	CXAR_HUMAN
7	186	13.1	873	1	FAS2_DROME
8	180	12.7	365	1	CXAR_MOUSE
9	171	12.1	632	1	UN89_CABEL
10	164	11.6	344	1	CEA6_HUMAN
11	160.5	11.3	1367	1	VGR2_MOUSE
12	159.5	11.2	837	1	NCM2_MOUSE
13	157	11.1	868	1	NRG2_RAT
14	156	11.0	756	1	NRG2_MOUSE
15	155.5	11.0	837	1	NCM2_HUMAN
16	155	10.9	850	1	NRG2_HUMAN
17	153.5	10.8	521	1	CEA1_MOUSE
18	153.5	10.8	1343	1	VGR2_RAT
19	151	10.6	1092	1	NCA2_XENLA
20	148.5	10.5	519	1	ECTO_RAT
21	148	10.4	1088	1	NCAL_XENLA
22	147.5	10.4	1091	1	NCAL_CHICK
23	147	10.4	526	1	CEA1_HUMAN
24	147	10.4	1897	1	PTPF_HUMAN
25	146.5	10.3	761	1	NCAL_HUMAN
26	146.5	10.3	848	1	NCAL_HUMAN
27	146	10.3	1051	1	PTK1_CHICK
28	145	10.2	333	1	AMAL_DROME
29	144.5	10.2	349	1	CEA8_HUMAN
30	144	10.2	1302	1	NRG1_DROME
31	143	10.1	858	1	NCAL_RAT
32	142.5	10.0	265	1	CEA7_HUMAN
33	140.5	9.9	344	1	NTRI_RAT

34	140.5	9.9	847	1	CD22_HUMAN	P20273 homo sapien
35	140	9.9	359	1	LACH_DROME	Q24372 drosophila
36	140	9.9	853	1	NCAL_BOVIN	P31836 bos taurus
37	140	9.9	1906	1	KML5_CHICK	P11799 gallus gall
38	140	9.9	4391	1	PGBM_HUMAN	P98160 homo sapien
39	139	9.8	725	1	NCA2_MOUSE	P13594 mus musculus
40	139	9.8	1115	1	NCAL_MOUSE	P13595 mus musculus
41	139	9.8	3707	1	PGBM_MOUSE	Q05793 mus musculus
42	138.5	9.8	702	1	CEA5_HUMAN	P06731 homo sapien
43	138.5	9.8	1709	1	SN_HUMAN	Q9b222 homo sapien
44	138	9.7	764	1	ICCR_DROME	Q08180 drosophila
45	137.5	9.7	344	1	NTRI_MOUSE	Q99pj0 mus musculus

ALIGNMENTS

RESULT 1
JAM2_HUMAN
ID _JAM2_HUMAN STANDARD; PRT; 298 AA.
AC P57087;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Junctional adhesion molecule 2 precursor (Vascular endothelial
DE Junctional adhesion molecule 2 precursor (Vascular endothelial
GN JAM2 OR VEJAM OR C21ORP43.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
[1]
RN NCBI_TaxID=9606;
RP SEQUENCE FROM N.A.
RC TISSUE=Vascular endothelial cells;
RX MEDLINE=20317114; PubMed=10779521;
RA Palmeri D., van Zante A., Huang C.C., Hemmerich S., Rosen S.D.;
RT "Vascular endothelial junction-associated molecule, a novel member of
RT the immunoglobulin superfamily, is localized to intercellular
RT boundaries of endothelial cells.";
RL J. Biol. Chem. 275:19139-19145(2000).
[2]
RN NCBI_TaxID=9606;
RP SEQUENCE FROM N.A.
RC TISSUE=Placenta;
RX MEDLINE=20507930; PubMed=10945976;
RA Cunningham S.A., Arrate M.P., Rodriguez J.M., Bjercke R.J.,
RA Vanderslice P., Morris A.P., Brock T.A.;
RT "A novel protein with homology to the junctional adhesion molecule:
RT Characterization of leukocyte interactions.";
RL J. Biol. Chem. 275:34750-34756(2000).
[3]
RN NCBI_TaxID=9606;
RP SEQUENCE FROM N.A.
RC TISSUE=Lung;
RX MEDLINE=22388257; PubMed=12477932;
RA Klausner R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shennen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diachenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Raha S.S., Loquellano N.A., Peters G.J., Carninci P., Prange C.,
RA Bosak S.A., McSwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Villalon D.K., Muny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko V., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalek U., Smailus D.E.,
RA Schnur A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length
RT human and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).

DR EMBL; AF207907; AAF22829.1; -.
DR EMBL; AF172398; AAD48877.1; -.
DR EMBL; AL136649; CAB66584.1; -.
DR PIR; A59406; S56749.
DR Genew; HGNC:14685; F1R.
DR MIM; 605721; -.
DR GO; 0006954; P:inflammatory response; TAS.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003006; Ig_MHC.
DR Pfam; PF00047; Ig; 2.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS00835; IG-LIKE; 2.
KW Tight junction; Immunoglobulin domain; Glycoprotein; Transmembrane;
KW Repeat; Signal.
FT SIGNAL 1 25 POTENTIAL.
FT CHAIN 26 299 JUNCTIONAL ADHESION MOLECULE 1.
FT DOMAIN 26 238 EXTRACELLULAR (POTENTIAL).
FT TRANSMEM 239 259 POTENTIAL.
FT DOMAIN 27 125 CYTOPLASMIC (POTENTIAL).
FT DOMAIN 135 228 IG-LIKE V-TYPE 1.
FT DISULFID 50 109 IG-LIKE V-TYPE 2.
FT DISULFID 153 212 POTENTIAL.
FT CARBOHYD 185 212 POTENTIAL.
SQ SEQUENCE 299 AA; 32583 MW; D95DE2FEA23D2851 CRC64;

Query Match 30.0%; Score 426; DB 1; Length 299;
Best Local Similarity 35.6%; Pred. No. 4.7e-29;
Matches 100; Conservative 42; Mismatches 99; Indels 40; Gaps 7;

QY 4 AY-GFSAPKQQVVTAVXQAEAILACKTPKTVXSRLEWK-KLGRSVSFVYQQTLOGDF 61
DB 51 AYSGFSSP-----RVEMKFDQDITRLVCYNNKITASY 83

QY 62 KRAEMIDFNIRIKNVTSDAGKYRCEVSAPSQGNLEEDTTLVLVAPVAPSPCEVPS 121
DB 84 EDKVTFLPTGTFPSVTRDGTGYTCWVS--EEGNSYGEVVKLIIVLPSPKPTWNIPS 141

QY 122 SALSQGTWVELRCODKEGNPAPEYTFKDGIRLLENPRLGQSQTNSSTVNTKTGLQFNT 181
DB 142 SATIGNRAVLTCSEQDGPSPSEYTFKDGIVMTNPKSTRAFNSSTVLPPTGELVFDP 201

QY 182 VKLDTGEYSCEARNVGVYRCFGK-RMQVDLLNISGIIAAVVAVALVSVCGLVGYCAQ 240
DB 202 LGSADTGEYSCEARNVGYTPMTSNVMEAVRNVGVVAAVLVTLILGILVFGIWFAY 261

QY 241 RKGYE-SKETSFOKSNSSSKA-----TTMSNDPKHTKSFII 276
DB 262 SRGHFDRT---KKGTSKKKVIYVQPSARSEGEFKQTSFLV 299

RESULT 3
JAM1_BOVIN STANDARD; PRT; 298 AA.
AC Q9XT56;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Juncional adhesion molecule 1 precursor (JAM).
GN F1R OR JAM1.
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovidae; Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=99323940; PubMed=10395639;
RA Ozaki H., Ishii K., Horiuchi H., Arai H., Kawamoto T., Okawa K.,
RA Iwamatsu A., Kita T.;
RT "Combined treatment of TNF-alpha and IFN-gamma causes redistribution
of juncional adhesion molecule in human endothelial cells.";

J. Immunol. 163:553-557(1999).
-!- FUNCTION: Seems to plays a role in epithelial tight junction formation. Appears early in primordial forms of cell junctions and recruits PARD3. The association of the PARD6-PARD3 complex may prevent the interaction of PARD3 with JAM1, thereby preventing tight junction assembly (By similarity). Plays a role in regulating monocyte transmigration involved in integrity of epithelial barrier. Involved in platelet activation.
-!- SUBUNIT: Interacts with the first PDZ domain of PARD3. The association between PARD3 and PARD6B probably disrupts this interaction (By similarity).
-!- SUBCELLULAR LOCATION: Type I membrane protein (Potential).
-!- TISSUE SPECIFICITY: Localized at tight junctions of both epithelial and endothelial cells.
-!- SIMILARITY: BELONGS TO THE IMMUNOGLOBULIN SUPERFAMILY.
-!- SIMILARITY: Contains 2 immunoglobulin-like V-type domains.

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EMBL; AF111714; AAD42051.1; -.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003598; Ig_C2.
DR InterPro; IPR003006; Ig_MHC.
DR Pfam; PF00047; Ig; 2.
DR SMART; SM00408; IGV; 1.
DR PROSITE; PS00835; IG-LIKE; 2.
KW Tight junction; Immunoglobulin domain; Glycoprotein; Transmembrane;
KW Repeat; Signal.
FT SIGNAL 1 24 POTENTIAL.
FT CHAIN 25 298 JUNCTIONAL ADHESION MOLECULE 1.
FT DOMAIN 25 237 EXTRACELLULAR (POTENTIAL).
FT TRANSMEM 238 258 POTENTIAL.
FT DOMAIN 259 298 CYTOPLASMIC (POTENTIAL).
FT DOMAIN 28 124 IG-LIKE V-TYPE 1.
FT DOMAIN 134 227 IG-LIKE V-TYPE 2.
FT DISULFID 49 108 POTENTIAL.
FT DISULFID 152 211 POTENTIAL.
FT CARBOHYD 184 184 N-LINKED (GLCNAC...) (POTENTIAL).
SQ SEQUENCE 298 AA; 32456 MW; 714FE1C1714769A2 CRC64;

Query Match 29.2%; Score 414.5; DB 1; Length 298;
Best Local Similarity 35.3%; Pred. No. 4.5e-28;
Matches 98; Conservative 41; Mismatches 100; Indels 39; Gaps 7;

QY 6 GFSAPKQQVVTAVXQAEAILACKTPKTVXSRLEWK-KLGRSVSFVYQQTLOGDFKNR 64
DB 53 GFSSP-----RVEMKFTGDIRGLVCYNNKITASYENR 85

QY 65 AEMIDFNIRIKNVTSDAGKYRCEVSAPSQGNLEEDTTLVLVAPVAPSPCEVPSAL 124
DB 86 VTFSDTGTFPSVTRDGTGYTCWVS--DEGNTYGEVTVQLIVLPSPKPTINVPSSVT 143

QY 125 SCTVVELRCQDKEGNPAPEYTFKDGIRLLENPRLGQSQTNSSTVNTKTGLQFNTVSK 184
DB 144 IGTRAVLTCSERDGSPSPSEYKFKDGVEMPLEPKSNRAFSNYSYTLNQKTGELIFPVSA 203

QY 185 LDTGEYSCEARNVGVYRCFGK-----RMQVDLLNISGIIAAVVAVALVSVCGLVGYCAQ 240
DB 204 SDTGDFTGQAQN--GY-ASPVKSDTVHMDAVELNMGVIAAVFVTLILGALIFGIWFAY 260

QY 241 RKGYE--SKETSFOKSNSSSKATTMSNDPKHTKSFII 276
DB 261 SRGYFDRAGKTSNKKVIYVQPSARSDGEFQTSFLV 298

RESULT 4
JAM1_MOUSE

ID JAM1_MOUSE STANDARD; PRT; 300 AA.
 AC O88732;
 DT 16-OCT-2001 (Rel. 40, Created)
 DT 16-OCT-2001 (Rel. 40, Last sequence update)
 DT 15-SEP-2003 (Rel. 42, Last annotation update)
 DE Junctional adhesion molecule 1 precursor (JAM).
 GN F1LR OR JAM1 OR JCAM1 OR JCAM.
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 OX NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RP MEDLINE=98327120; PubMed=9660867;
 RA Martin-Padura I., Lostaglio S., Schneemann M., Williams L., Romano M.,
 RA Fruscella P., Panzeri C., Stoppacciaro A., Ruco L., Villa A.,
 RA Simmons D., Dejana E.;
 RA "Junctional adhesion molecule, a novel member of the immunoglobulin
 RT superfamily that distributes at intercellular junctions and modulates
 RT monocyte transmigration.";
 RL J. Cell Biol. 142:117-127 (1998).
 RN [2]
 RP INTERACTION WITH PARD3.
 RP PubMed=11447115;
 RA Ebnet K., Suzuki A., Horikoshi Y., Hirose T.,
 RA Meyer zu Bruckwede M.-K., Ohno S., Vestweber D.;
 RA "The cell polarity protein ASIP/PAR-3 directly associates with
 RT junctional adhesion molecule (JAM).";
 RL EMBO J. 20:3738-3748 (2001).
 RN [3]
 RP X-RAY CRYSTALLOGRAPHY (2.5 ANGSTROMS) OF 212-238.
 RP PubMed=11500366;
 RA Kostrewa D., Brockhaus M., D'Arcy A., Dale G.E., Nelboeck P.,
 RA Schmid G., Mueller F., Bazzoni G., Dejana E., Bartfai T.,
 RA Winkler F.K., Hennig M.;
 RA "X-ray structure of junctional adhesion molecule: structural basis for
 RT homophilic adhesion via a novel dimerization motif.";
 RL EMBO J. 20:4391-4398 (2001).
 CC -1- FUNCTION: Seems to play a role in epithelial tight junction
 CC formation. Appears early in primordial forms of cell junctions and
 CC recruits PARD3. The association of the PARD6-PARD3 complex may
 CC prevent the interaction of PARD3 with JAM1, thereby preventing
 CC tight junction assembly. Plays a role in regulating monocyte
 CC transmigration involved in integrity of epithelial barrier.
 CC Involved in platelet activation.
 CC -1- SUBUNIT: Interacts with the first PDZ domain of PARD3. The
 CC association between PARD3 and PARD6 probably disrupts this
 CC interaction.
 CC -1- SUBCELLULAR LOCATION: Type I membrane protein (Potential).
 CC Localized at tight junctions of both epithelial and endothelial
 CC cells.
 CC -1- TISSUE SPECIFICITY: Localized at tight junctions of both
 CC epithelial and endothelial cells.
 CC -1- SIMILARITY: BELONGS TO THE IMMUNOGLOBULIN SUPERFAMILY.
 CC -1- SIMILARITY: Contains 2 immunoglobulin-like V-type domains.
 CC -----
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 CC -----
 DR EMBL; U89915; AAC32982.1; -;
 DR EMBL; 1F97; 22-NOV-01.
 DR MGD; MGI:1321398; F1lr.
 DR InterPro; IPR007110; Ig-like.
 DR InterPro; IPR003006; Ig_MHC.
 DR InterPro; IPR003596; Ig_V.
 DR Pfam; PF00047; ig; 2.
 DR SMART; SM00406; IGV; 1.
 DR PROSITE; PS50835; IG_LIKE; 2.

KW Tight junction; Immunoglobulin domain; Glycoprotein; Transmembrane;
 KW Repeat; Signal; 3D-structure.
 FT SIGNAL 1 26 POTENTIAL.
 FT CHAIN 27 300 JUNCTIONAL ADHESION MOLECULE 1.
 FT DOMAIN 27 238 EXTRACELLULAR (POTENTIAL).
 FT TRANSMEM 239 259 POTENTIAL.
 FT DOMAIN 260 299 CYTOPLASMIC (POTENTIAL).
 FT DOMAIN 28 122 IG-LIKE V-TYPE 1.
 FT DOMAIN 134 230 IG-LIKE V-TYPE 2.
 FT DISULFID 49 108 POTENTIAL.
 FT DISULFID 152 212 POTENTIAL.
 FT CARBOHYD 42 42 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 185 185 N-LINKED (GLCNAC. . .) (POTENTIAL).
 SQ SEQUENCE 300 AA; 32368 MW; 391F3E48FFB97EC CRC64;
 Query Match 28.9%; Score 410; DB 1; Length 300;
 Best Local Similarity 35.9%; Pred. No. 1.1e-27;
 Matches 99; Conservative 49; Mismatches 116; Indels 12; Gaps 6;
 QY 7 FSAPKQOQVTVAYQEAAILACKTPKTVYASRLWKKL-CRSVSVFYVYQOTLQGDFFKRA 65
 Db YTAQSDVQVPE---NESIKLTCTYSGFSSPRVWKFVQGSTALVCYNSQITAPYADRV 86
 QY 66 EMIDFNIRIKNVTSDAGKYRCEVSAPSEOCQNEEDTVTLEVLVAPVSCPEVPSSALS 125
 Db TFSSTGTFSSVTRKONGEYTCWVS--EEGQNYGEVSIHLTVLPSPKFTISVPSSVTI 144
 QY 126 GTVVELRCQDKGNPAPEYTFWFKGIRLLENPRLGSSQ--TNSSYTMTTKTGTQFNVTSK 184
 Db GNRVLVTCSEHDGSPPEYSEYFWKDGIGSMLTADAKTRAFWNSSFTIDPKSGDLIFDPVTA 204
 QY 185 LDTGEYSCEARNVSG-YRRCPRKMQVDLNIIGITAAVVALVISVGLGVCYAKRG 243
 Db FDSGEYVQAGNGYGTAMRSEAAHMDAVELNVGVIAAVLTVLLGLLIFGVWFAYSRG 264
 QY 244 YF---SKETSFOKSNSSSKATTMTSENDFKHTKSFII 276
 Db YFETTKGTAPGKVIYQSPSTSEGEFKOTSSFLV 300
 RESULT 5
 A33 HUMAN
 ID A33 HUMAN STANDARD; PRT; 319 AA.
 AC O39795;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 15-SEP-2003 (Rel. 42, Last annotation update)
 DE Cell surface A33 antigen precursor (Glycoprotein A33).
 GN GPA33.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
 RC TISSUE=Colon carcinoma;
 RX MEDLINE=97165045; PubMed=9012807;
 RA Heath J.K., White S.J., Johnstone C.N., Catimel B., Simpson R.J.,
 RA Moritz R.L., Tu G.-F., Ji H., Whitehead R.H., Groenen L.C.,
 RA Scott A.M., Ritter G., Cohen L., Welt S., Old L.J., Nice E.C.,
 RA Burgess A.W.;
 RA "The human A33 antigen is a transmembrane glycoprotein and a novel
 RT member of the immunoglobulin superfamily.";
 RT Proc. Natl. Acad. Sci. U.S.A. 94:469-474 (1997).
 RN [2]
 RP POST-TRANSLATIONAL MODIFICATIONS.
 RX MEDLINE=97396159; PubMed=9245713;
 RA Ritter G., Cohen L.S., Nice E.C., Catimel B., Burgess A.W.,
 RA Moritz R.L., Ji H., Heath J.K., White S.J., Welt S., Old L.J.,
 RA Simpson R.J.;
 RA "Characterization of posttranslational modifications of human A33
 RT antigen, a novel palmitoylated surface glycoprotein of human
 RT gastrointestinal epithelium.";

RL Biochem. Biophys. Res. Commun. 236:682-686 (1997).
CC -!- FUNCTION: MAY PLAY A ROLE IN CELL-CELL RECOGNITION AND SIGNALING.
CC -!- SUBCELLULAR LOCATION: Type I membrane protein.
CC -!- TISSUE SPECIFICITY: EXPRESSED IN NORMAL GASTROINTESTINAL
CC EPITHELIUM AND IN 95% OF COLON CANCERS.
CC -!- PTM: N-GLYCOSYLATED, CONTAINS APPROXIMATELY 8 KDA OF N-LINKED
CC CARBOHYDRATE.
CC -!- PTM: PALMITOYLATED.
CC -!- SIMILARITY: Contains 1 immunoglobulin-like V-type domain.
CC -!- SIMILARITY: Contains 1 immunoglobulin-like C2-type domain.
CC
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CC or send an email to license@isb-sib.ch).
CC -----
CC EMBL; U79725; AAC50957.1; -;
CC Genew; HGNC:4445; GPA33.
CC MIW; 602171; -;
CC GO; GO:0005888; C:proteoglycan integral to plasma membrane; TAS.
CC GO; GO:0004872; F:receptor activity; TAS.
CC InterPro; IPR007110; IG-like.
CC InterPro; IPR003006; IG_MHC.
CC Pfam; PF00047; IG_2.
CC SMART; SM00406; IGV_1.
CC PROSITE; PS08835; IG_LIKE; 2.
CC Immunoglobulin domain; Lipoprotein; Palmitate; Glycoprotein;
CC Transmembrane; Signal; Antigen.
KW SIGNAL 1 21
FT CHAIN 22 319 CELL SURFACE A33 ANTIGEN.
FT DOMAIN 22 235 EXTRACELLULAR (POTENTIAL).
FT TRANSMEM 236 256 POTENTIAL.
FT DOMAIN 257 319 CYTOPLASMIC (POTENTIAL).
FT DOMAIN 22 134 IG-LIKE V-TYPE.
FT DOMAIN 140 227 IG-LIKE C2-TYPE.
FT DOMAIN 258 261 POLY-CYS.
FT DISULFID 43 117 POTENTIAL.
FT DISULFID 146 222 POTENTIAL.
FT DISULFID 162 211 POTENTIAL.
FT CARBOHYD 112 112 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 200 202 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 223 223 N-LINKED (GLCNAC. . .) (POTENTIAL).
SQ SEQUENCE 319 AA; 35632 MW; 98FC7AAF45C2408E CRC64;
Query Match 16.3%; Score 231; DB 1; Length 319;
Best Local Similarity 28.6%; Pred. No. 2e-12;
Matches 72; Conservative 41; Mismatches 97; Indels 42; Gaps 11;
QY 8 SAPKQDVVTAAXYQEAAILACKTPKTVKSR---LEWKKL-----GRSVFVYQQT-LQ 58
Db 23 SVETPQDVLASQKSVTLPC-TYHTSTSSREGIIQWDKLLLTHTERVVIMPFNSKNYIH 81
QY 59 GD-FKNR-----AEMIDFNIRIKNVRSDAGKYRCEVSAPEQSQNLEEDT---VTLEV 108
Db 82 GELYKNRVSISNNAEQSDASTIIDQLTWADNGTYECSVLSMD-----LEGNTKSRVLLV 137
QY 109 LVAPAVPSCEVPSSALSGTVVELRCQKEGNPAPEYTFWFKDGIHLLNPRIGSQSTSSY 168
Db 138 LVPPSPKECIEGEGTIIGNNIQLTQSKGKSGPTQPSYKRYNINLQBPQAQASGPVS 197
QY 169 TMTNKTQTLQNTVSKLDTGEYSCEARNVGYRSCP-GKRMQVDLNTS-----GIIA 220
Db 198 LKNISTDT-----SGYICTSSNEGTQFCNITVAVRSPSMNVALVYGIAGVWA 247
QY 221 AVVVVALVISVC 232
Db 248 ALIIIGIIIVCC 259

RESULT 6
CXADR HUMAN STANDARD; PRT; 365 AA.
ID CXADR_HUMAN STANDARD; PRT; 365 AA.
AC P78310; O00694;
DT 30-MAY-2000 (Rel. 39, Created)
DT 30-MAY-2000 (Rel. 39, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Coxsackievirus and adenovirus receptor precursor (Coxsackievirus B-
DE adenovirus receptor) (hCAR) (CVB3 binding protein).
GN CXADR OR CAR.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=97190109; PubMed=9036860;
RA Bergelson J.M., Cunningham J.A., Droguett G., Kurt-Jones E.,
RA Krithivas A., Hong J.S., Horwitz M.S., Crowell R.L., Finberg R.W.;
RT "Isolation of a common receptor for Coxsackie B viruses and
RT adenoviruses 2 and 5";
RL Science 275:1320-1323 (1997).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=97250541; PubMed=9096397;
RA Tomko R.P., Xu R., Philipson L.;
RT "hCAR and MCAR: the human and mouse cellular receptors for subgroup C
RT adenoviruses and group B coxsackieviruses";
RL Proc. Natl. Acad. Sci. U.S.A. 94:3352-3356 (1997).
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE=20008750; PubMed=10543405;
RA Bowles K.R., Gibson J., Wu J., Shaffer L.G., Towbin J.A.,
RA Bowles N.E.;
RT "Genomic organization and chromosomal localization of the human
RT Coxsackievirus B-adenovirus receptor gene";
RL Hum. Genet. 105:354-359 (1999).
RN [4]
RP SEQUENCE FROM N.A.
RX Anderson C.W., Kieleczawa J., Dunn J.J., Freimuth P.;
RT "Sequence and expression of CXADR, the human gene for the
RT coxsackievirus and adenovirus receptor";
RL Submitted (OCT-1999) to the EMBL/GenBank/DBJ databases.
RN [5]
RP SEQUENCE FROM N.A.
RX Anderson B., Tomko R., Andersson K., Darban H., Oncu D., Mizra M.,
RX Sollerbrant K., Sonhammer E., Philipson L.;
RT "Putative regulatory domains in the human and mouse CAR genes";
RL Submitted (MAR-2000) to the EMBL/GenBank/DBJ databases.
RN [6]
RP SEQUENCE FROM N.A.
RX TISSUE=Cervix;
MEDLINE=22388257; PubMed=12477932;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Udwin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullaly S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smallos D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length
RT human and mouse cDNA sequences";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).

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CC CC -!- FUNCTION: SERVES AS A RECEPTOR FOR GROUP B COXSACKIEVIRUSES AND
CC CC SUBGROUP C OF ADENOVIRUSES (AD2 AND AD5).
CC CC -!- SUBCELLULAR LOCATION: Type I membrane protein.
CC CC -!- SIMILARITY: Contains 2 immunoglobulin-like C2-type domains.
CC CC -----
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CC CC or send an email to license@isb-sib.ch).
CC CC -----
DR EMBL; Y07593; CA68868.1; -
DR EMBL; U90716; AAC51234.1; -
DR EMBL; AF169366; AAF05908.1; -
DR EMBL; AF169360; AAF05908.1; JOINED.
DR EMBL; AF169361; AAF05908.1; JOINED.
DR EMBL; AF169362; AAF05908.1; JOINED.
DR EMBL; AF169363; AAF05908.1; JOINED.
DR EMBL; AF169364; AAF05908.1; JOINED.
DR EMBL; AF169365; AAF05908.1; JOINED.
DR EMBL; AF200465; AAF24344.1; -
DR EMBL; AF242865; AAG01088.1; -
DR EMBL; AF242862; AAG01088.1; JOINED.
DR EMBL; AF242864; AAG01088.1; JOINED.
DR EMBL; BC003684; AAH03684.1; -
DR EMBL; BC010536; AAH10536.1; -
DR PDB; 1EJ; 13-JUL-01.
DR PDB; 1FSW; 08-NOV-00.
DR PDB; 1KAC; 24-NOV-99.
DR GENE; HGNC:2559; CXADR.
DR MIM; 602621; -
DR GO; GO:0005887; C: integral to plasma membrane; TAS.
DR GO; GO:0004872; F: receptor activity; TAS.
DR InterPro; IPR007110; IG-like.
DR InterPro; IPR003598; IG_C2.
DR InterPro; IPR003006; IG_MHC.
DR Pfam; PF00047; Ig; 2.
DR SMART; SM00408; IGC2; 1.
DR PROSITE; PS50835; IG LIKE; 2.
KW Immunoglobulin domain; Receptor; Transmembrane; Glycoprotein; Signal;
KW Repeat; 3D-structure.
FT SIGNAL 1 19
FT CHAIN 20 365
FT DOMAIN 20 237
FT TRANSMEM 238 258
FT DOMAIN 259 365
FT DOMAIN 20 134
FT DOMAIN 141 228
FT DISULFID 41 120
FT DISULFID 162 212
FT CARBOHYD 106 106
FT CARBOHYD 201 201
SQ SEQUENCE 365 AA; 40029 MW; AB01C634C67FE64 CRC64;

Query Match 13.4%; Score 190.5; DB 1; Length 365;
Best Local Similarity 23.5%; Pred. No. 6.4e-09;
Matches 64; Conservative 52; Mismatches 117; Indels 39; Gaps 8;

QY 4 AYGSAPKDDQVAVTVAVXQAEILACK---TPKTVKSLRW-----KKLGRSVFVY 53
DB 17 ARSLITTPPEEMIEKAGETAYLPCKFTLSPEDQGLDIEWLSPADNQKVDQ-VILLYS 75
QY 54 QQTLOGDF-----KNRAEMIDFNIRIKNTRSDAGKVCESAPSEQGNLEED 102
DB 76 GDKIYDDYVPLDKGRVHFTSNDLKSGDASINVTLQLSDIGTYQCKV----KKAPGVANK 131
QY 103 TVTLEVLVAPVPCSEVPSSALSGTVTVELRCQDKEGNPAPYTFWKGIRLLENPRLSGQ 162
DB 132 KIHLVWLKPSGARYCYDGSSEIGSDFKICEPKESGLPLQYEQK-----LSDSQ 182
QY 163 STNSSYTMNTKGTGLQFTVTSKLDGTGEVSCARNVGVRCRPGKRMQVDLNLISGITA-A 221

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Db 183 KMTPSWLAEMTSVSVKSNASEYSGTCTVRNRVGSQCLLRNLNVPPSNKAGLIAGA 242
QY 222 VVVVALVIVSCLGVGYAQKGYFSKETSFK 253
Db 243 IIGTLALALIGLIIFCCRRK---RREKYEK 271

RESULT 7
FAS2_DROME
ID FAS2 DROME STANDARD; PRT; 873 AA.
AC P34082; P34083; Q9W4M6;
DT 01-FEB-1994 (Rel. 28, Created)
DT 01-FEB-1994 (Rel. 28, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Fasciclin II precursor (FAS II).
GN FAS2 OR EG:EG0007.3 OR CG3665.
OS Drosophila melanogaster (Fruit fly).
OC Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
OC Ephydroidea; Drosophilidae; Drosophila.
OX NCBI_TaxID=7227;
RN [1]
RP SEQUENCE FROM N.A. (ISOFORMS 1 AND 2), FUNCTION, SUBCELLULAR LOCATION,
RP AND TISSUE SPECIFICITY.
RC STRAIN=Canton-S;
RX MEDLINE=92005695; PubMed=1913818;
RT "Genetic analysis of growth cone guidance in Drosophila: fasciclin II
RT functions as a neuronal recognition molecule.";
RL Cell 67:45-57(1991).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=Berkely;
RX MEDLINE=20196006; PubMed=10731132;
RA Adams M.D., Celnik S.E., Holt R.A., Evans C.A., Gocayne J.D.,
RA Amanatides P.G., Scherer S.E., Li P.W., Hoskins R.A., Galle R.F.,
RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
RA Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
RA Brandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D.,
RA Wan K.H., Doyle C., Baxter E.G., Helt J.G., Nelson C.R., Miklos G.L.G.,
RA Abril J.F., Agbayani A., An H.-J., Andrews-Pfannkoch C., Baldwin D.,
RA Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
RA Beeson K.V., Benos P.V., Berman B.P., Bhandari D., Bolshakov S.,
RA Borkova D., Botchan M.R., Bouck J., Brokstein P., Brotter P.,
RA Burtis K.C., Buesam D.A., Butler H., Cadieu E., Center A., Chandra I.,
RA Cherry J.M., Ciesla S., Dahlke C., Davenport L.B., Davies P.,
RA de Pablos B., Delcher A., Deng Z., Mays A.D., Dew I., Dietz S.M.,
RA Dodson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
RA Durbin K.J., Evangelista C.C., Ferraz C., Ferreira S., Fleischmann W.,
RA Foeller C., Gabrielian A.E., Garg N.S., Gelbart W.M., Glasser K.,
RA Glodek A., Gong F., Gorrell J.H., Gu Z., Guan F., Harris K.,
RA Harris N.L., Harvey D., Heiman T.J., Hernandez J.R., Houck J.,
RA Hostin D., Houston K.A., Howland T.J., Wei M.-H., Ibegwam C.,
RA Jalali M., Kalush F., Karpen G.H., Ke Z., Kennison J.A., Ketchum K.A.,
RA Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,
RA Laoko P., Lei Y., Levitsky A.A., Li J., Li Z., Liang Y., Lin X.,
RA Liu X., Mattai B., McIntosh T.C., McLeod M.P., McPherson D.,
RA Merkulov G., Milshina N.V., Mobarry C., Morris J., Moshrefi A.,
RA Mount S.M., Moy M., Murphy B., Murphy L., Muzny D.M., Nelson D.L.,
RA Nelson D.R., Nelson K.A., Nixon K., Nusskern D.R., Pacle J.M.,
RA Palazzolo M., Pittman G.S., Pan S., Pollard J.J., Puri V., Reese M.G.,
RA Reinert K., Remington K., Saunders R.D.C., Scheeler F., Shen H.,
RA Shue B.C., Siden-Kiamos I., Simpson M., Skupski M.P., Smith T.,
RA Spier E., Spradling A.C., Stapleton M., Strong R., Sun E.,
RA Svirskas R., Tector C., Turner R., Venter E., Wang A.H., Wang X.,
RA Wang Z.-Y., Wassarman D.A., Weinstock G.M., Weissbach J.,
RA Williams S.M., Woodage T., Worley K.C., Wu D., Yang S., Yao Q.A.,
RA Ye J., Yeh R.-F., Zaveri J.S., Zhan M., Zhang G., Zhao Q., Zheng L.,
RA Zheng X.H., Zhong F.N., Zhong W., Zhou X., Zhu S., Zhu X., Smith H.O.,
RA Gibbs R.A., Myers E.W., Rubin G.M., Venter J.C.;
RT "The genome sequence of Drosophila melanogaster.";
RL Science 287:2185-2195(2000).

```


RN [3]
 RP REVISIONS, AND ALTERNATIVE SPLICING.
 RC MEDLINE=22436069; PubMed=12537572;
 RX Misra S., Crosby M.A., Mungall C.J., Matthews B.B., Campbell K.S.,
 RA Hradecky P., Huang Y., Kaninker J.S., Millburn G.H., Prochuk S.E.,
 RA Smith C.D., Tupy J.L., Whitfield E.J., Bayraktaroglu L., Berman B.P.,
 RA Bettencourt B.R., Celniker S.E., de Grey A.D.N.J., Drysdale R.A.,
 RA Harris N.L., Richter J., Russo S., Schroeder A.J., Shu S.Q.,
 RA Stapleton M., Yamada C., Ashburner M., Gelbart W.M., Rubin G.M.,
 RA Lewis S.E.;
 RT "Annotation of the Drosophila melanogaster euchromatic genome: a
 RT systematic review."
 RL Genome Biol. 3:RESEARCH0083.1-RESEARCH0083.22(2002).
 RN [4]
 RP SEQUENCE OF 22-873 FROM N.A.
 RC STRAIN=Oregon-R;
 RX MEDLINE=20196011; PubMed=10731137;
 RA Benos P.V., Gatt M.K., Ashburner M., Murphy L., Harris D.,
 RA Barrell B.G., Ferraz C., Vidal S., Brun C., Demailles J., Cadieu E.,
 RA Dreano S., Gloux S., Lelaure V., Mottier S., Galibert F., Borkova D.,
 RA Minana B., Kafatos F.C., Louis C., Siden-Kiamos I., Bolshakov S.,
 RA Papagiannakis G., Spanos L., Cox S., Madueno E., de Pablo B.,
 RA Modolell J., Peter A., Schoettler P., Werner M., Mourkioti F.,
 RA Beinert N., Dowe G., Schaefer U., Jaekle H., Bucheton A.,
 RA Callister D.M., Campbell L.A., Darlamitsou A., Henderson N.S.,
 RA McMillan P.J., Salles C., Tait E.A., Valenti P., Saunders R.D.C.,
 RA Glover D.M.;
 RT "From sequence to chromosome: the tip of the X chromosome of D.
 RT melanogaster."
 RL Science 287:2220-2222(2000).
 CC -!- FUNCTION: Neuronal recognition molecule for the MP1 axon pathway,
 CC pathway recognition for axons during the development of nerve
 CC fascicles.
 CC -!- SUBCELLULAR LOCATION: Type I membrane protein (isoform 1);
 CC attached to the membrane by a GPI-anchor (isoform 2).
 CC -!- ALTERNATIVE PRODUCTS:
 CC Event=Alternative splicing; Named isoforms=3;
 CC Comment=Experimental confirmation may be lacking for some
 CC isoforms;
 CC Name=1; Synonyms=A, Membrane-linked;
 CC IsoId=P34082-1; Sequence=displayed;
 CC Name=2; Synonyms=C, Phosphatidylinositol-linked;
 CC IsoId=P34082-2; Sequence=VSP_002508, VSP_002509;
 CC Name=3; Synonyms=B;
 CC IsoId=P34082-3; Sequence=VSP_002506, VSP_002507;
 CC -!- TISSUE SPECIFICITY: In embryos, both isoforms are initially
 CC expressed on the surface of the axons in the MP1 pathway and later
 CC on several other longitudinal axon fascicles.
 CC -!- SIMILARITY: Contains 5 immunoglobulin-like C2-type domains.
 CC -!- SIMILARITY: Contains 2 fibronectin type III domains.
 CC -----
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 CC -----
 CC EMBL; M77165; AAA28527.1; -;
 CC EMBL; M77166; AAA28528.1; -;
 CC EMBL; AL033125; CAA21825.1; -;
 CC EMBL; AE003430; AAF45925.2; -;
 CC EMBL; AE003430; RAN09119.1; -;
 CC EMBL; AL033125; CAA21826.1; -;
 CC F01; A41054; A41054.
 CC FlyBase; FBgn000635; Faa2.
 CC GO; GO:0005886; C:plasma membrane; IDA.
 CC GO; GO:0007156; P:homophilic cell adhesion; IDA.
 CC GO; GO:0007611; P:learning and/or memory; IMP.
 CC GO; GO:0016319; P:mushroom body development; IMP.
 CC GO; GO:0008038; P:neuronal cell recognition; IDA.

DR GO; GO:0045473; P:response to ethanol (sensu Insecta); NAS.
 DR InterPro; IPR003961; FN III.
 DR InterPro; IPR007110; Ig-like.
 DR InterPro; IPR003598; Ig_C2.
 DR InterPro; IPR003006; Ig_MHC.
 DR Pfam; PF00041; fn3; 2.
 DR Pfam; PF00047; ig; 5.
 DR SMART; SM00060; FN3; 2.
 DR SMART; SM00408; IG2; 3.
 DR PROSITE; PS00835; IG-LIKE; 5.
 DR Cell adhesion; Glycoprotein; Repeat; Alternative splicing;
 KW Immunoglobulin domain; Transmembrane; GPI-anchor; Signal;
 KW Neurogenesis.
 FT SIGNAL 1 28 POTENTIAL.
 FT CHAIN 29 873 FASCICLIN II.
 FT DOMAIN 29 751 EXTRACELLULAR (POTENTIAL).
 FT TRANSMEM 752 769 POTENTIAL.
 FT DOMAIN 770 873 CYTOPLASMIC (POTENTIAL).
 FT DOMAIN 31 131 IG-LIKE C2-TYPE 1.
 FT DOMAIN 138 223 IG-LIKE C2-TYPE 2.
 FT DOMAIN 230 318 IG-LIKE C2-TYPE 3.
 FT DOMAIN 323 423 IG-LIKE C2-TYPE 4.
 FT DOMAIN 428 520 IG-LIKE C2-TYPE 5.
 FT DOMAIN 544 619 FIBRONECTIN TYPE-III 1.
 FT DOMAIN 648 705 FIBRONECTIN TYPE-III 2.
 FT DISULFID 54 116 POTENTIAL.
 FT DISULFID 159 207 POTENTIAL.
 FT DISULFID 251 302 POTENTIAL.
 FT DISULFID 343 407 POTENTIAL.
 FT DISULFID 451 504 POTENTIAL.
 FT CARBOHYD 74 74 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 250 250 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 330 330 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 448 448 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 458 458 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 576 576 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT VARSPLIC 737 773 GUIDIOVAERQVSSAAIVGAIAGVLLLFVVDLLC ->
 FT DNPSPSTGNAPLAQLLVITALTMLLLPPTHTA (in
 FT isoform 3).
 FT /FTId=VSP_002506.
 FT Missing (in isoform 3).
 FT /FTId=VSP_002507.
 FT IDVIOVAERQVSSAAIVGAIAGVLLLFVVDLLCCITVH
 FT MGVMTACMKAKRSPSEIDDEAKLGSQVKEP -> ESDS
 FT ANNGLTLLYAGVSGVGLHRLFTTTTTTATSTTTT
 FT SITTTATTITLTATTSITLLSVLASMLA (in isoform
 FT 2).
 FT /FTId=VSP_002508.
 FT Missing (in isoform 2).
 FT /FTId=VSP_002509.
 FT S -> R (IN REF. 4; CAA21826).
 FT CONFLICT 804 804
 FT SEQUENCE 873 AA; 96926 MW; E48F0484CCE62AC9 CRC64;
 SQ
 Query Match 13.1%; Score 186; DB 1; Length 873;
 Best Local Similarity 24.6%; Pred. No. 4.5e-08;
 Matches 67; Conservative 50; Mismatches 101; Indels 54; Gaps 13;
 QY 8 SAPKQQVVTVVXYQEAAILACKT---PKKTVAERLEWKKLG---RSVFFVYQQTLLQGD 61
 DB 142 NAFENQYPTLG---QDYVVMCEVKADPNPTI---DMLRNGDPIRTNDKVVVQT----- 189
 QY 62 KNRAEMIDPNIRIKNVTRSDAGKYCEVSAPSEQGNLEEDVTLEVLVAVPVPCEVPS 121
 DB 190 -----NGLLRNVQSEDEGIYTCR-AAVETGTGELLER-TIRVEVFQPEIISPTNL 239
 QY 122 SALSGTWTVELRCQDKGNPAPETVTFKQIGIRLLENPRLGQSQTSSSYTNTKTGLQFNT 181
 DB 240 EAVEGKPAANCTAR-GKVPFPEISIRDATQI-----NVATDRFQNPQGLVTIIS 291
 QY 182 VSKLDTGEYSCEARNVGYRRCFGK-----RMQVDDL-NISGIIAAVVVVVALVISVCGLG 235
 DB 292 VSQDDYGTVTCLAKNRAGVVDQKTLNVLVRQIYELYNVTGARTKEIAI----- 341

QY 236 VCYAQRKGYFSKETSFKNSSSKATTMSND 267
 DB 342 TCRA--KGRPAITFRWGTEYVNGQDD 371

RESULT 8
 CXAR_MOUSE
 ID CXAR_MOUSE STANDARD; PRT; 365 AA.
 AC P97792; O09052;
 DT 30-MAY-2000 (Rel. 39, Created)
 DT 30-MAY-2000 (Rel. 39, Last sequence update)
 DT 15-SEP-2003 (Rel. 42, Last annotation update)
 DE Coxsackievirus and adenovirus receptor homolog precursor (mCAR).
 GN CXADR OR CAR.
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 OC NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=C57BL/6J; TISSUE=Liver;
 RX MEDLINE=97190109; PubMed=9036860;
 RA Bergelson J.M., Cunningham J.A., Droguett G., Kurt-Jones E., R.W.;
 RA Krithivas A., Hong J.S., Horwitz M.S., Crowell R.L., Finberg R.W.;
 RT "Isolation of a common receptor for Coxsackie B viruses and
 RT adenoviruses 2 and 5.";
 RL Science 275:1320-1323(1997).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC STRAIN=C3H/MAI;
 RX MEDLINE=97250541; PubMed=9096397;
 RA Tomko R.P., Xu R., Philipson L.;
 RA "HCAR and MCAIR: the human and mouse cellular receptors for subgroup C
 RT adenoviruses and group B coxsackieviruses.";
 RL Proc. Natl. Acad. Sci. U.S.A. 94:3352-3356(1997).
 RN [3]
 RP SEQUENCE FROM N.A.
 RC STRAIN=C57BL/6J; TISSUE=Liver;
 RA Bergelson J.M., Krithivas A., Crowell T.L., Finberg R.W.;
 RT "The murine CAR homologue (mCAR) is a receptor for coxsackie B
 RT viruses and adenoviruses.";
 RL Submitted (MAY-1997) to the EMBL/GenBank/DBJ databases.
 CC -1- SUBCELLULAR LOCATION: Type I membrane protein.
 CC -1- SIMILARITY: Contains 2 immunoglobulin-like C2-type domains.
 CC
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 CC
 CC EMBL; Y10320; CAA71368.1; -
 CC EMBL; U90715; AAC53148.1; -
 CC EMBL; Y11925; CAA72679.1; -
 CC MGD; MGI:1201679; Cxadr.
 CC InterPro; IPR007110; Ig-like.
 CC InterPro; IPR003598; Ig C2.
 CC InterPro; IPR003006; Ig_MHC.
 CC Pfam; PF00047; ig; 2.
 CC SMART; SM00408; IGC2; 1.
 CC PROSITE; PSS0835; IG_LIKE; 2.
 KW Immunoglobulin domain; Receptor; Transmembrane; Glycoprotein; Signal;
 KW Repeat.
 FT SIGNAL
 FT CHAIN 1 19 POTENTIAL.
 FT CHAIN 20 365 COXSACKIEVIRUS AND ADENOVIRUS RECEPTOR
 FT HOMOLOG.
 FT DOMAIN 20 237 EXTRACELLULAR (POTENTIAL).
 FT TRANSMEM 238 258 POTENTIAL.
 FT DOMAIN 259 365 CYTOPLASMIC (POTENTIAL).
 FT DOMAIN 20 136 IG-LIKE C2-TYPE 1.
 FT DOMAIN 141 228 IG-LIKE C2-TYPE 2.

FT DISULFID 41 120 BY SIMILARITY.
 FT DISULFID 162 212 BY SIMILARITY.
 FT CARBOHYD 106 106 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 201 201 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CONFLICT 340 365 VAAPNLSRMGAVPMIPAPQSKDGSIV -> FKYAYKTDGIT
 VV (IN REF. 2 AND 3).
 SQ SEQUENCE 365 AA; 39947 MW; 544584B52A34B2A2 CRC64;

Query Match 12.7%; Score 180; DB 1; Length 365;
 Best Local Similarity 23.7%; Pred. No. 5e-08;
 Matches 75; Conservative 44; Mismatches 130; Indels 68; Gaps 9;

QY 6 GFSAKPKQVVVAVKYOEAILACK---TPKKTAVASRLW-----KKLGRVSVFYV--- 52
 DB 19 GLSITTEPQRIEKAKGETAYLPCKFTLSPEQDGLDIEMLSPSDNIQVQVILYSGDK 78
 QY 53 -----YQOTLQDGF---KNRAEMIDFNIRKNVTRSDAGKYCEVSAPSEQQNLEEDTVT 105
 DB 79 IYDNYYPDLKGRVHFTSNDVKSGDASINVTNLQLSDIGTYQCKV-----KKAPGVANKKFL 134
 QY 106 LEVLVAPAVPSCVPSALSCTVVVELRCQEGNPAPETWFKDGIRLLENPRLGSSQSTN 165
 DB 135 LTVLVKPSGTRCFVDGSEEGNDPKLCKEPKESGLPLQFEW-----OKLS 179
 QY 166 SSYTMNT-----KTGLQFNVTSKLDTGEYSCARNVSVYRCPCGRKMQVDDLNISGII 219
 DB 180 DSQTMPTPLAEMTSPVISVKNASSEYSGTYSCTVQNRVSGDQCMLRLDVPVPSNRAGTI 239
 QY 220 AAVVW---VALVISVCGLVGYCAQR-----KGYSKETSFKNS 256
 DB 240 AGAVIGTLLALVLTGAILFCCHRRKREEKVEVHHDIREDVPPPKSRSTARSVIGSNH 299
 QY 257 SSRATTMSNDFKHTKS 273
 DB 300 SSLGSMSPSNMGEYSKT 316

RESULT 9
 UN89 CAEEL
 ID UN89 CAEEL STANDARD; PRT; 6632 AA.
 AC O01761; Q17362;
 DT 15-SEP-2003 (Rel. 42, Created)
 DT 15-SEP-2003 (Rel. 42, Last sequence update)
 DT 15-SEP-2003 (Rel. 42, Last annotation update)
 DE Muscle M-line assembly protein unc-89 (Uncoordinated protein 89).
 GN UNC-89 OR C99D1.1.
 OS Caenorhabditis elegans.
 OC Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida; Rhabditoidea;
 OC Rhabditidae; Peloderinae; Caenorhabditis.
 OC NCBI_TaxID=6239;
 RN [1]
 RP SEQUENCE FROM N.A., FUNCTION, AND TISSUE SPECIFICITY.
 RC STRAIN=Bristol N2;
 RX MEDLINE=96180278; PubMed=8603916;
 RA Benian G.M., Tinley T.L., Tang X., Borodovsky M.;
 RT "The Caenorhabditis elegans gene unc-89, required for muscle M-line
 RT assembly, encodes a giant modular protein composed of Ig and signal
 RT transduction domains.";
 RL J. Cell Biol. 132:835-848(1996).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Bristol N2.
 RA Du Z., Le T.T., Wilson R.;
 RL Submitted (MAY-1997) to the EMBL/GenBank/DBJ databases.
 RN [3]
 RP REVISIONS.
 RA Waterston R.;
 RL Submitted (APR-2002) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: Structural component of the muscle M-line. Myofilament
 CC lattice assembly begins with positional cues laid down in the
 CC basement membrane and muscle cell membrane. UNC-89 responds to
 CC these signals, localizes, and then participates in assembling an
 CC M-line.

15-SEP-2003 (Rel. 42, Last annotation update)
 Vascular endothelial growth factor receptor 2 precursor (EC 2.7.1.112)
 (VEGFR-2) (Protein-tyrosine kinase receptor flk-1) (Fetal liver kinase
 1) (Kinase NK)
 KDR OR FLK1 OR FLK-1.
 Mus musculus (Mouse).
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 NCBI_TaxID=10090;
 [1]
 SEQUENCE FROM N.A.
 STRAIN=BALB/C; TISSUE=Embryo;
 MEDLINE=93208880; PubMed=7681362;
 RA Mallaue B., Witzmann-Voos S., Schumacher H., Martinez R.,
 Mueller N.P.H., Rieau W., Ullrich A.;
 "High affinity VEGF binding and developmental expression suggest
 Flk-1 as a major regulator of vasculogenesis and angiogenesis.";
 Cell 72:835-846(1993).
 [2]
 SEQUENCE FROM N.A.
 STRAIN=C3H/He; TISSUE=Fetal liver;
 MEDLINE=92020984; PubMed=1717995;
 RA Mathews W., Jordan C.T., Gavin M., Jenkins N.A., Copeland N.G.,
 Lenischka I.R.;
 "A receptor tyrosine kinase cDNA isolated from a population of
 enriched primitive hematopoietic cells and exhibiting close genetic
 linkage to c-kit.";
 Proc. Natl. Acad. Sci. U.S.A. 88:9026-9030(1991).
 [3]
 SEQUENCE FROM N.A.
 MEDLINE=93141255; PubMed=8423988;
 RA Oelrichs R.B., Reid H.H., Bernard O., Ziemiecki A., Wilks A.F.;
 "NYK/PLK-1: a putative receptor protein tyrosine kinase isolated from
 E10 embryonic neuroepithelium is expressed in endothelial cells of
 the developing embryo";
 Oncogene 8:11-18(1993).
 [4]
 SEQUENCE OF 1-15 FROM N.A.
 MEDLINE=96032749; PubMed=7559454;
 RA Patterson C., Perrella M.A., Heich C.-M., Yoshizumi M., Lee M.-E.,
 Harber E.;
 "Cloning and functional analysis of the promoter for KDR/flk-1, a
 receptor for vascular endothelial growth factor.";
 J. Biol. Chem. 270:23111-23118(1995).
 [5]
 FUNCTION.
 MEDLINE=93361481; PubMed=8356051;
 RA Quinn T.P., Peters K.G., de Vries C., Ferrara N., Williams L.T.;
 "Fetal liver kinase 1 is a receptor for vascular endothelial growth
 factor and is selectively expressed in vascular endothelium.";
 Proc. Natl. Acad. Sci. U.S.A. 90:7533-7537(1993).
 CC -1- FUNCTION: RECEPTOR FOR VEGF OR VEGF-C. HAS A TYROSINE-PROTEIN
 KINASE ACTIVITY. THE VEGF-KINASE LIGAND/RECEPTOR SIGNALING SYSTEM
 PLAYS A KEY ROLE IN VASCULAR DEVELOPMENT AND REGULATION OF
 VASCULAR PERMEABILITY.
 CC -1- CATALYTIC ACTIVITY: ATP + a protein tyrosine = ADP + protein
 tyrosine phosphate.
 CC -1- SUBCELLULAR LOCATION: Type I membrane protein.
 CC -1- TISSUE SPECIFICITY: EXPRESSED AT HIGH LEVELS IN ADULT HEART, LUNG,
 KIDNEY, BRAIN AND SKELETAL MUSCLE, BUT IS ALSO EXPRESSED AT LOWER
 LEVELS IN MOST OTHER ADULT TISSUES.
 CC -1- SIMILARITY: BELONGS TO THE CSF-1/PDGF RECEPTOR FAMILY OF TYROSINE-
 PROTEIN KINASES.
 CC -1- SIMILARITY: Contains 7 immunoglobulin-like C2-type domains.
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 or send an email to license@isb-sib.ch).

DR EMBL; X70842; CAA50192.1; -;
 DR EMBL; X59397; CAA42040.1; -;
 DR EMBL; S53103; AAB25043.1; -;
 DR EMBL; X89777; CAA61917.1; -;
 DR PIR; A41228; A41228.
 DR HSSP; P11362; 1FGK.
 DR MGD; MGI:96683; Kdr.
 DR InterPro; IPR007110; Ig-like.
 DR InterPro; IPR003598; Ig_C2.
 DR InterPro; IPR003006; Ig_MHC.
 DR InterPro; IPR000719; Prot_kinase.
 DR InterPro; IPR001824; RTKinaseIII.
 DR Pfam; PF00047; ig; 6.
 DR Pfam; PF00069; Pkinase; 1.
 DR ProDom; PD000001; Prot_kinase; 2.
 DR SMART; SM00408; IGC2; 1.
 DR SMART; SM00219; TyrKc; 1.
 DR PROSITE; PS0835; IG LIKE; 5.
 DR PROSITE; PS00107; PROTEIN_KINASE_ATP; 1.
 DR PROSITE; PS00111; PROTEIN_KINASE_DOM; 1.
 DR PROSITE; PS00109; PROTEIN_KINASE_TYR; 1.
 DR PROSITE; PS00240; RECEPTOR_TYR_KIN_III; 1.
 DR Angiogenesis; Signal; Transferrase; Tyrosine-protein kinase; Receptor;
 Transmembrane; Glycoprotein; Phosphorylation; ATP-binding;
 Immunoglobulin domain; Repeat.
 KW SIGNAL 1 19 POTENTIAL.
 FT CHAIN 20 1367 VASCULAR ENDOTHELIAL GROWTH FACTOR
 FT RECEPTOR 2.
 FT DOMAIN 20 762 EXTRACELLULAR (POTENTIAL).
 FT TRANSMEM 763 784 POTENTIAL.
 FT DOMAIN 785 1367 CYTOPLASMIC (POTENTIAL).
 FT DOMAIN 46 111 IG-LIKE C2-TYPE 1.
 FT DOMAIN 143 209 IG-LIKE C2-TYPE 2.
 FT DOMAIN 226 325 IG-LIKE C2-TYPE 3.
 FT DOMAIN 330 416 IG-LIKE C2-TYPE 4.
 FT DOMAIN 423 542 IG-LIKE C2-TYPE 5.
 FT DOMAIN 549 656 IG-LIKE C2-TYPE 6.
 FT DOMAIN 665 751 IG-LIKE C2-TYPE 7.
 FT DOMAIN 832 1160 PROTEIN KINASE.
 FT NP_BIND 838 846 ATP (BY SIMILARITY).
 FT BINDING 866 866 ATP (BY SIMILARITY).
 FT ACT_SITE 1026 1026 BY SIMILARITY.
 FT CARBOHYD 46 46 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 98 98 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 145 145 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 160 160 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 247 247 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 320 320 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 376 376 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 397 397 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 509 509 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 521 521 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 578 578 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 611 611 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 617 617 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 629 629 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 673 673 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 702 702 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 719 719 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT MOD_RES 1057 1057 PHOSPHORYLATION (AUTO-) (BY SIMILARITY).
 FT CONFLICT 25 25 P -> T (IN REF. 1).
 FT CONFLICT 679 679 G -> D (IN REF. 3).
 FT CONFLICT 783 784 LV -> VL (IN REF. 1).
 FT CONFLICT 917 917 S -> C (IN REF. 1).
 FT CONFLICT 1341 1367 QLTSLGSGFVPAPPPTGNHGGAA -> RSPPPV
 (IN REF. 3).
 SQ SEQUENCE 1367 AA; 152516 MW; EFC99704FIDCA266 CRC64;

Query Match 11.3%; Score 160.5; DB 1; Length 1367;
 Best Local Similarity 24.8%; Pred. No. 1.1e-05;
 Matches 53; Conservative 23; Mismatches 75; Indels 63; Gaps 6;

[illegible]

DE (Neural- and thymus-derived activator for ERBB kinases) (NTAK) [1].

GN NR2 OR NTAK.

OS Rattus norvegicus (Rat).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.

OX NCBI_TaxID=10116;

RN [1]

RP SEQUENCE FROM N.A., SEQUENCE OF 128-162, AND ALTERNATIVE SPLICING,

RX MEDLINE=98006324; PubMed=9348101;

RA Higaehiyama S., Horikawa M., Yamada K., Ichino N., Nakano N.,

RA Nakagawa T., Miyagawa J., Matsushita N., Negatsu T., Taniguchi N.,

RA Ishiguro H.;

RT "A novel brain-derived member of the epidermal growth factor family

RT that interacts with ErbB3 and ErbB4.";

RL J. Biochem. 122:675-680(1997).

RN [2]

RP SEQUENCE OF 109-868 FROM N.A. (ISOFORMS 6 AND 7).

RC TISSUE=Cerebellum;

RX MEDLINE=97311397; PubMed=9168114;

RA Chang H., Riese D.J. II, Gilbert W., Stern D.F., McMahon U.J.;

RT "Ligands for ErbB-family receptors encoded by a neurotrophin-like

RT gene.";

RL Nature 387:509-512(1997).

CC -1- FUNCTION: DIRECT LIGAND FOR ERBB3 AND ERBB4 TYROSINE KINASE

CC RECEPTORS. CONCOMITANTLY RECRUITS ERBB1 AND ERBB2 CORECEPTORS,

CC RESULTING IN LIGAND-STIMULATED TYROSINE PHOSPHORYLATION AND

CC ACTIVATION OF THE ERBB RECEPTORS. MAY ALSO PROMOTE THE

CC HETERODIMERIZATION WITH THE EGF RECEPTOR.

CC -1- SUBCELLULAR LOCATION: EXISTS AS AN TYPE I MEMBRANE PROTEIN AND AS

CC A PROTEOLYTICALLY RELEASED SOLUBLE GROWTH FACTOR FORM. THE

CC MEMBRANE-BOUND FORM DOES NOT SEEM TO BE ACTIVE (BY SIMILARITY).

CC -1- ALTERNATIVE PRODUCTS:

CC Event=Alternative splicing; Named isoforms=7;

CC Comment=Additional isoforms seem to exist. The alpha-type and

CC beta-type differ in the EGF-Like domain,

CC Name=1; Synonyms=NTAK-alpha1;

CC IsoId=O35569-1; Sequence=Displayed;

CC Name=2; Synonyms=NTAK-alpha2A;

CC IsoId=O35569-2; Sequence=VSP_003471;

CC Name=3; Synonyms=NTAK-alpha2B, NTAK-alpha2-1P;

CC IsoId=O35569-3; Sequence=VSP_003466, VSP_003471;

CC Name=4; Synonyms=NTAK-beta;

CC IsoId=O35569-4; Sequence=VSP_003470;

CC Name=5; Synonyms=NTAK-gamma;

CC IsoId=O35569-5; Sequence=VSP_003467, VSP_003468;

CC Name=6; Synonyms=NRG2-alpha;

CC IsoId=O35569-6; Sequence=VSP_003472, VSP_003473;

CC Name=7; Synonyms=NRG2-beta;

CC IsoId=O35569-7; Sequence=VSP_003465, VSP_003469;

CC -1- TISSUE SPECIFICITY: EXPRESSED IN MOST PARTS OF THE BRAIN,

CC ESPECIALLY THE OLFACTORY BULB AND CEREBELLUM WHERE IT LOCALIZES IN

CC GRANULE AND PURKINJE CELLS. IN THE HIPPOCAMPUS, FOUND IN THE

CC GRANULE CELLS OF THE DENTATE GYRUS. IN THE BASAL FOREBRAIN, FOUND

CC IN THE CHOLINERGIC CELLS. IN THE HINDRAIN, WEAKLY DETECTABLE IN

CC THE MOTOR TRIGEMINAL NUCLEUS. NOT DETECTED IN THE HYPOTHALAMUS.

CC ALSO FOUND IN THE LIVER AND IN THE THYMUS. NOT DETECTED IN HEART,

CC ADRENAL GLAND, OR TESTIS.

CC -1- DEVELOPMENTAL STAGE: IN THE EMBRYO, EXPRESSED IN THE BRAIN OF

CC E11.5 EMBRYOS WHERE IT IS FOUND IN THE TELENCEPHALON, BUT NOT IN

CC THE HINDRAIN. NOT FOUND IN THE HEART. IN THE ADULT, FOUND IN

CC BRAIN AND THYMUS.

CC -1- DOMAIN: THE CYTOPLASMIC DOMAIN MAY BE INVOLVED IN THE REGULATION

CC OF TRAFFICKING AND PROTEOLYTIC PROCESSING. REGULATION OF THE

CC PROTEOLYTIC PROCESSING INVOLVES INITIAL INTRACELLULAR DOMAIN

CC DIMERIZATION (BY SIMILARITY).

CC -1- DOMAIN: ERBB RECEPTOR BINDING IS ELICITED ENTIRELY BY THE EGF-LIKE

CC DOMAIN (BY SIMILARITY).

CC -1- PTM: PROTEOLYTIC CLEAVAGE CLOSE TO THE PLASMA MEMBRANE ON THE

CC EXTERNAL FACE LEADS TO THE RELEASE OF THE SOLUBLE GROWTH FACTOR

CC FORM (BY SIMILARITY).

CC -1- PTM: EXTENSIVE GLYCOSYLATION PRECEDES THE PROTEOLYTIC CLEAVAGE (BY

CC SIMILARITY).

CC -1- SIMILARITY: Contains 1 EGF-like domain.

CC -1- SIMILARITY: Contains 1 immunoglobulin-like C2-type domain.

CC -1- SIMILARITY: BELONGS TO THE NEUREGULIN FAMILY.

CC -----

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CC -----

CC EMBL; D89995; BAA23344.1; -

CC EMBL; D89996; BAA23345.1; -

CC EMBL; D89997; BAA23346.1; -

CC EMBL; D89998; BAA23347.1; -

CC EMBL; AB001576; BAA23348.1; -

CC PIR; JC5701; JC5701.

CC PIR; JC5702; JC5702.

CC HSP; Q12784; 1HRE.

CC InterPro; IPR006209; EGF like.

CC InterPro; IPR006210; IEGF.

CC InterPro; IPR007110; Ig-like.

CC InterPro; IPR003598; Ig C2.

CC InterPro; IPR003006; Ig MHC.

CC Pfam; PF00008; EGF; 1.

CC Pfam; PF00047; Ig; 1.

CC Pfam; PF02158; Neuregulin; 1.

CC SMART; SM00181; EGF; 1.

CC SMART; SM00408; IGG2; 1.

CC PROSITE; PS00022; EGF 1; 1.

CC PROSITE; PS01186; EGF-2; 1.

CC PROSITE; PS0835; IG-LIKE; 1.

CC Growth factor; EGF-like domain; Immunoglobulin domain; Glycoprotein;

CC Transmembrane; Multigene family; Alternative splicing.

CC PROPEP 1 127

CC CHAIN 128 868 PRO-NEUREGULIN-2, MEMBRANE-BOUND FORM.

CC CHAIN 128 428 NEUREGULIN-2

CC DOMAIN 128 429 EXTRACELLULAR (POTENTIAL).

CC TRANSMEM 430 450 INTERNAL SIGNAL SEQUENCE (POTENTIAL).

CC DOMAIN 451 868 CYTOPLASMIC (POTENTIAL).

CC DOMAIN 253 348 IG-LIKE C2-TYPE.

CC DOMAIN 346 356 SER/THR-RICH.

CC DOMAIN 357 398 EGF-LIKE.

CC DOMAIN 22 32 POLY-SER.

CC DOMAIN 35 45 POLY-THR.

CC DOMAIN 56 59 POLY-ALA.

CC DOMAIN 103 106 POLY-PRO.

CC DISULFID 739 745 BY SIMILARITY.

CC DISULFID 273 327 BY SIMILARITY.

CC DISULFID 361 375 BY SIMILARITY.

CC DISULFID 369 386 BY SIMILARITY.

CC DISULFID 388 397 BY SIMILARITY.

CC CARBOHYD 33 33 N-LINKED (GLCNAC. .) (POTENTIAL).

CC CARBOHYD 34 34 N-LINKED (GLCNAC. .) (POTENTIAL).

CC CARBOHYD 163 163 N-LINKED (GLCNAC. .) (POTENTIAL).

CC CARBOHYD 294 294 N-LINKED (GLCNAC. .) (POTENTIAL).

CC CARBOHYD 362 362 N-LINKED (GLCNAC. .) (POTENTIAL).

CC VARSPLIC 1 108 Missing (in isoform 7).

CC VARSPLIC 220 222 /FTid=VSP_003465.

CC VARSPLIC 388 388 PLV -> PFF (in isoform 3).

CC VARSPLIC 389 389 C -> G (in isoform 5).

CC VARSPLIC 389 868 /FTid=VSP_003467.

CC VARSPLIC 390 412 Missing (in isoform 5).

CC VARSPLIC 390 421 /FTid=VSP_003468.

CC VARSPLIC 414 421 NGFFGQRCLEKPLRLYMPDPKQ -> VGYTGRCCQFAMV

CC VARSPLIC 390 421 NES (in isoform 7).

CC VARSPLIC 414 421 /FTid=VSP_003469.

CC VARSPLIC 390 421 NGFFGQRCLEKPLRLYMPDPKQKHLGFELKE -> VGYTG

CC VARSPLIC 414 421 DRCCQFAMVNFSK (in isoform 4).

CC VARSPLIC 414 421 /FTid=VSP_003470.

CC VARSPLIC 414 421 Missing (in isoform 2 and isoform 3).

```

FT FT VARSPLIC 414 439 /FTId=VSP_003471.
FT FT HIGFELKEAEELYQKRVLTITGICVA -> SVLMDTPGTGV
FT FT SSSQWSTSPSTLDN (in isoform 6).
FT FT /FTId=VSP_003472.
FT FT Missing (in isoform 6).
FT FT /FTId=VSP_003473.
FT FT S -> F (IN REF. 2).
FT FT CONFLICT 724 724 R -> H (IN REF. 2).
SQ SEQUENCE 868 AA; 93776 MW; 3C7D4D94DBE64DE2 CRC64;

Query Match
Best Local Similarity 27.7%; Pred. No. 1.3e-05; Length 868;
Matches 56; Conservative 24; Mismatches 86; Indels 36; Gaps 8;

QY 44 LGRSVSFVYQOQLQGD--FKNAEMIDFNIRIKNVTSDAGKYRCEVSAPEQOQNLEE 101
DB 124 LERNQRYIFFLEPTQPLVFKTAFAVDN--GKNI-KKEVGKILCTDCAATPKLKKMKS 260
QY 102 DVTILEVLVAPVPCEVSSALSGTVVELRCQDEKGNPAPYTWFKGIRLLENPRLGS 161
DB 261 QTGEV-----GEKQSLKCEAAGNPQPSRYRWFKDGKELNR-----S 296
QY 162 OSTNSSYTMNTKGTQLQNTVSKLDTGEVSCERNVGVRRCPGKRMQVDDLNI-----S 216
DB 297 RDRIKYGNGKNSLQFNKVKVEDAGEYVCEAENILKDTVRG-RLHVNVSVTTLSSWS 355
QY 217 GIIAAVVVALVISVGLGVGY 238
DB 356 GHARKCNETAKSYCVNG-GVCY 376

RESULT 14
NRG2_MOUSE
ID NRG2_MOUSE STANDARD; PRT; 756 AA.
AC P56974;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE (Pro-neuregulin-2 precursor (Pro-NRG2) [Contains: Neuregulin-2 (NRG-2)
  (Derivative of neuregulin 1) (DON-1)].)
GN NRG2.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxId=10090;
RN [1]
RP SEQUENCE FROM N.A. (ISOFORMS NRG2-5; NRG2-10 AND NRG2-16A).
RC STRAIN=C57BL/6; TISSUE=Brain;
RX MEDLINE=97311398; PubMed=9168115;
RA Caraway K.L.III, Weber J.L., Unger M.J., Ledesma J., Yu N.,
RA Gasmann M., Lal C.;
RT "Neuregulin-2, a new ligand of ErbB3/ErbB4-receptor tyrosine
  kinases.";
RL Nature 387:512-516(1997).
RN [2]
RP SEQUENCE OF 150-756 FROM N.A. (ISOFORMS DON-1M AND DON-1S).
RC TISSUE=Choroid plexus;
RX MEDLINE=97342638; PubMed=9199335;
RA Busfield S.J., Michnick D.A., Chikering T.W., Revett T.L., Ma J.,
RA Woolf E.A., Comrack C.A., Dussault B.J., Woolf J., Goodearl A.D.J.,
RA Gearing D.P.;
RT "Characterization of a neuregulin-related gene, Don-1, that is highly
  expressed in restricted regions of the cerebellum and hippocampus.";
RL Mol. Cell. Biol. 17:4007-4014(1997).
CC -1- FUNCTION: DIRECT LIGAND FOR ERBB3 AND ERBB4 TYROSINE KINASE
  RECEPTORS. CONCOMITANTLY RECRUITS ERBB1 AND ERBB2 CORECEPTORS,
  RESULTING IN LIGAND-STIMULATED TYROSINE PHOSPHORYLATION AND
  ACTIVATION OF THE ERBB RECEPTORS. MAY ALSO PROMOTE THE
  HETERO-DIMERIZATION WITH THE EGF RECEPTOR.
CC -1- SUBCELLULAR LOCATION: EXISTS AS AN TYPE I MEMBRANE PROTEIN AND AS
  A PROTEOLYTICALLY RELEASED SOLUBLE GROWTH FACTOR FORM. THE
  MEMBRANE-BOUND FORM DOES NOT SEEM TO BE ACTIVE (BY SIMILARITY).
CC -1- ALTERNATIVE PRODUCTS:

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CC CC Event=Alternative splicing; Named isoforms=4;
CC CC Comment=Additional isoforms seem to exist;
CC CC Name=NRG2-16A;
CC CC IsoId=P56974-1; Sequence=Displayed;
CC CC Name=DON-1M;
CC CC IsoId=P56974-2; Sequence=VSP_003464;
CC CC Name=DON-1S; Synonyms=NRG2-5;
CC CC IsoId=P56974-3; Sequence=VSP_003462; VSP_003463;
CC CC Name=NRG2-10;
CC CC IsoId=P56974-4; Sequence=VSP_003460; VSP_003461;
CC CC TISSUE SPECIFICITY: HIGHEST EXPRESSION IN THE BRAIN, WITH LOWER
  LEVELS IN THE LUNG. IN THE CEREBELLUM, FOUND IN GRANULE AND
  PURKINJE CELLS.
CC CC -1- DOMAIN: THE CYTOPLASMIC DOMAIN MAY BE INVOLVED IN THE REGULATION
  OF TRAFFICKING AND PROTEOLYTIC PROCESSING. REGULATION OF THE
  PROTEOLYTIC PROCESSING INVOLVES INITIAL INTRACELLULAR DOMAIN
  DIMERIZATION (BY SIMILARITY).
CC CC -1- DOMAIN: ERBB RECEPTOR BINDING IS ELICITED ENTIRELY BY THE EGF-LIKE
  DOMAIN (BY SIMILARITY).
CC CC -1- PTM: PROTEOLYTIC CLEAVAGE CLOSE TO THE PLASMA MEMBRANE ON THE
  EXTERNAL FACE LEADS TO THE RELEASE OF THE SOLUBLE GROWTH FACTOR
  FORM (BY SIMILARITY).
CC CC -1- PTM: EXTENSIVE GLYCOSYLATION PRECEDES THE PROTEOLYTIC CLEAVAGE (BY
  SIMILARITY).
CC CC -1- SIMILARITY: Contains 1 EGF-like domain.
CC CC -1- SIMILARITY: Contains 1 immunoglobulin-like C2-type domain.
CC CC -1- SIMILARITY: BELONGS TO THE NEUREGULIN FAMILY.
CC CC HSSP; Q12784; 1HRE.
DR MGD; MGI:1098246; Nrg2.
DR InterPro; IPR006209; EGF like.
DR InterPro; IPR006210; IEGF.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003598; Ig C2.
DR InterPro; IPR003006; Ig_MHC.
DR InterPro; IPR002154; Neuregulin.
DR Pfam; PF00008; EGF; 1.
DR Pfam; PF00047; Ig; 1.
DR Pfam; PF02158; Neuregulin; 1.
DR SMART; SM00181; EGF; 1.
DR SMART; SM00408; IGC2; 1.
DR PROSITE; PS00022; EGF_1; 1.
DR PROSITE; PS01186; EGF_2; 1.
DR PROSITE; PS00835; IG LIKE; 1.
DR Growth factor; EGF-like domain; Immunoglobulin domain; Glycoprotein;
  Transmembrane; Multigene family; Alternative splicing.
FT PROPEP 1 19 BY SIMILARITY.
FT CHAIN 20 756 PRO-NEUREGULIN-2, MEMBRANE-BOUND FORM.
FT CHAIN 20 314 NEUREGULIN-2.
FT DOMAIN 20 315 EXTRACELLULAR.
FT TRANSMEM 316 336 INTERNAL SIGNAL SEQUENCE (POTENTIAL).
FT DOMAIN 337 756 CYTOPLASMIC (POTENTIAL).
FT DOMAIN 145 240 IG-LIKE C2-TYPE.
FT DOMAIN 238 248 SER/THR-RICH.
FT DOMAIN 249 290 EGF-LIKE.
FT DOMAIN 627 633 POLY-PRO.
FT DISULFID 165 219 BY SIMILARITY.
FT DISULFID 253 267 BY SIMILARITY.
FT DISULFID 261 278 BY SIMILARITY.
FT DISULFID 280 289 BY SIMILARITY.
FT CARBOHYD 55 55 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 186 186 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 254 254 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 296 296 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT VARSPIC 280 280 C -> G (in isoform NRG2-10).
FT VARSPIC 281 756 /FTId=VSP_003460.
FT VARSPIC 282 330 /FTId=VSP_003461.
FT VARSPIC 282 330 VGVTDRCQCFQFAMVNFSEKHLGELKEELYQKRVLTITGCI
  CVALLVG -> NGFQGRCLKLPLRLYMPDPKQSVLMDT
  PGTGVSSQWSTSPSTLDN (in isoform DON-1S).
FT /FTId=VSP_003462.
FT Missing (in isoform DON-1S).
FT VARSPIC 331 756 /FTId=VSP_003463.

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FT VARSPLIC 282 307 VGYTGRCQOFAMVNFSKHLGFELKE -> NGFFGQRCLEK
FT LPLRLYMPDPKQK (in isoform DON-1M).
FT /FTID=VSP 003464.
SQ SEQUENCE 756 AA; 82213 MW; 51D85DC318BE678E CRC64;

Query Match 11.0%; Score 156; DB 1; Length 756;
Best Local Similarity 27.7%; Pred. No. 1.3e-05;
Matches 56; Conservative 24; Mismatches 86; Indels 36; Gaps 8;

QY 44 LGRSVSVVYQOTLQGD--FKNRAEMIDNIRIKNVTNRSDAGKYRCEVSAPSQGNLE 101
DB 96 LERNQRIYFLEETEQLVFKTAFAPDPN--GKNI-KKEVGKILCTDCATRPKLKKMKS 152
QY 102 DVTLEVLVAPVPSCEVPSSALSGTVVELRCQKGNPAPEYTWFKDGIIRLLENPLRGS 161
DB 153 QTGEV-----GEKQSLKCEAAGNQPSPYWFKDGKELNR-----S 188
QY 162 QSTNSSYTNWTKGTLOFNVTSKLDTGEYSCEARNVGYRRCGPKMQVDDLMI-----S 216
DB 189 RDRIKYGNGRKNRSLQFNKRVVEDAGEYVCEAEINILGKDTVRG-RLHVNVSVTTLSSWS 247
QY 217 GIIAAVVVALVISVCGLGVCY 238
DB 248 GHAKCNETAKSYCVNG-GVCY 268

RESULT 15
NCM2 HUMAN
ID NCM2 HUMAN STANDARD; PRT; 837 AA.
AC O15394;
DT 15-JUL-1998 (Rel. 36, Created)
DT 15-JUL-1998 (Rel. 36, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Neutral cell adhesion molecule 2 precursor (NCAM 2).
GN NCAM2 OR NCAM21.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RX MEDLINE=97369930; PubMed=9226371;
RA Paoloni-Giacobino A., Chen H., Antonarakis S.E.;
RT "Cloning of a novel human neural cell adhesion molecule gene (NCAM2)
RT that maps to chromosome region 21q21 and is potentially involved in
RT Down syndrome.";
RL Genomics 43:43-51(1997).
CC -!- FUNCTION: MAY PLAY IMPORTANT ROLES IN SELECTIVE FASCICULATION AND
CC ZONE-TO-ZONE PROJECTION OF THE PRIMARY OLFACTORY AXONS.
CC -!- SUBCELLULAR LOCATION: Type I membrane protein.
CC -!- TISSUE SPECIFICITY: EXPRESSED MOST STRONGLY IN ADULT AND FETAL
CC BRAIN.
CC -!- SIMILARITY: BELONGS TO THE IMMUNOGLOBULIN SUPERFAMILY.
CC -!- SIMILARITY: Contains 5 immunoglobulin-like C2-type domains.
CC -!- SIMILARITY: Contains 2 fibronectin type III domains.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
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CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
DB EMBL; U75330; AAB80803.1; -
DB Genew; HGNC:7657; NCAM2.
DB MIM; 602040; -
DB GO; GO:0016021; C:integral to membrane; TAS.
DB GO; GO:0005886; C:plasma membrane; TAS.
DB GO; GO:0007158; F:neuronal cell adhesion; TAS.
DB InterPro; IPR003961; FN.III.
DB InterPro; IPR007110; Ig-like.
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DR InterPro; IPR003598; Ig_C2.
DR InterPro; IPR003006; Ig_MHC.
DR Pfam; PF00041; fn3; 2.
DR Pfam; PF00047; ig; 5.
DR SMART; SM00060; FN3; 2.
DR SMART; SM00408; Igc2; 5.
DR PROSITE; PS00835; IG_LIKE; 5.
KW Cell adhesion; Transmembrane; Glycoprotein; Repeat;
KW Immunoglobulin domain; Signal.
FT SIGNAL 1 19 POTENTIAL.
FT CHAIN 20 837 NEURAL CELL ADHESION MOLECULE 2.
FT DOMAIN 20 697 EXTRACELLULAR (POTENTIAL).
FT TRANSMEM 698 718 POTENTIAL.
FT DOMAIN 719 837 CYTOPLASMIC (POTENTIAL).
FT DOMAIN 21 108 IG-LIKE C2-TYPE 1.
FT DOMAIN 113 202 IG-LIKE C2-TYPE 2.
FT DOMAIN 208 297 IG-LIKE C2-TYPE 3.
FT DOMAIN 302 396 IG-LIKE C2-TYPE 4.
FT DOMAIN 401 491 IG-LIKE C2-TYPE 5.
FT DOMAIN 482 581 FIBRONECTIN TYPE-III 1.
FT DOMAIN 594 678 FIBRONECTIN TYPE-III 2.
FT DISULFID 42 93 PROBABLE.
FT DISULFID 136 186 PROBABLE.
FT DISULFID 232 281 PROBABLE.
FT DISULFID 322 380 PROBABLE.
FT DISULFID 422 475 PROBABLE.
FT CARBOHYD 177 217 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 219 249 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 309 309 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 406 406 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 419 419 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 445 445 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 474 474 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 562 562 N-LINKED (GLCNAC. .) (POTENTIAL).
SQ SEQUENCE 837 AA; 92932 MW; C3D034106C5741C1 CRC64;

Query Match 11.0%; Score 155.5; DB 1; Length 837;
Best Local Similarity 26.6%; Pred. No. 1.7e-05;
Matches 41; Conservative 30; Mismatches 72; Indels 11; Gaps 4;

QY 47 SVSFVYQOTLQGDFFKNRAEMI-DFNIRIKNVTNRSDAGKYRCEVSAPSQGNLEEDTVT 105
DB 145 AVSWLYHNEEVTISDNRLANLNNLQILNINKSDEGIYRCEGRVEARGEIDFRDIIVI 204
QY 106 LEVLVAPVPSCEVPSSALSGTVVELRCQKGNPAPEYTWFKDGIIRLLENPLRGSQSTN 165
DB 205 VNVPPAISMPQKSFNATAERGEEMTFSCR-ASGSPPAISWFRNG-KLIEE-----N 254
QY 166 SSYTNWTKGTLOFNVTSKLDTGEYSCEARNVSG 199
DB 255 EKYLKSGNTELTVRNIINSDGPPVCRATNKAG 288

Search completed: December 9, 2003, 17:11:46
Job time : 10.1359 secs
```

GenCore version 5.1.6
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: December 9, 2003, 17:08:46 ; Search time 29.8118 Seconds
(without alignments)
2389.068 Million cell updates/sec

Title: US-09-852-797-76_COPY_23_298

Perfect score: 1418

Sequence: 1 YHKVGFSAKQVQVTVAVX.....SSKATMTSEDPKTKTSFII 276

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 830525 seqs, 258052604 residues

Total number of hits satisfying chosen parameters: 830525

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

SPTREMBL_23.*

1: sp_arches.*
2: sp_bacteria.*
3: sp_fungi.*
4: sp_human.*
5: sp_invertebrate.*
6: sp_mammal.*
7: sp_mhc.*
8: sp_organelle.*
9: sp_phage.*
10: sp_plant.*
11: sp_rodent.*
12: sp_virus.*
13: sp_vertebrate.*
14: sp_unclassified.*
15: sp_virus.*
16: sp_bacteriap.*
17: sp_archaeap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1159	81.7	298	11 Q9J159	Q9J159 mus musculus
2	1156	81.5	298	11 Q8CE95	Q8CE95 mus musculus
3	1156	81.5	298	11 Q8C5K9	Q8C5K9 mus musculus
4	487.5	34.4	310	11 Q9EPK4	Q9EPK4 mus musculus
5	486.5	34.3	310	11 Q9DBB7	Q9DBB7 mus musculus
6	484.5	34.2	310	11 Q9D1M9	Q9D1M9 mus musculus
7	477.5	33.7	309	4 Q96FL1	Q96FL1 homo sapien
8	477.5	33.7	310	4 Q9BXE7	Q9BXE7 homo sapien
9	477.5	33.7	355	4 Q8MWL8	Q8MWL8 homo sapien
10	451.5	31.8	181	11 Q9CWD9	Q9CWD9 mus musculus
11	410	28.9	300	11 Q8VC39	Q8VC39 mus musculus
12	409.5	28.9	300	11 Q9JHY1	Q9JHY1 rattus norv
13	393.5	27.8	259	4 Q9Y5B2	Q9Y5B2 homo sapien
14	315.5	22.2	173	11 Q9JKD5	Q9JKD5 rattus norv
15	225	15.9	335	13 Q9PWR4	Q9PWR4 gallus gall
16	224	15.8	318	13 Q91664	Q91664 xenopus lae

17	224	15.8	335	13 Q9YGH1	Q9YGH1 gallus gall
18	221	15.6	319	11 Q922D5	Q922D5 mus musculus
19	219	15.4	319	11 Q9JKA5	Q9JKA5 mus musculus
20	219	15.4	335	13 Q9YGV5	Q9YGV5 gallus gall
21	217	15.3	181	13 Q91665	Q91665 xenopus lae
22	210	14.8	259	4 Q95532	Q95532 homo sapien
23	198	14.0	390	4 Q96T50	Q96T50 homo sapien
24	198	14.0	390	4 Q96AP7	Q96AP7 homo sapien
25	197	13.9	407	11 Q9D2J4	Q9D2J4 mus musculus
26	196	13.8	394	11 Q925F2	Q925F2 mus musculus
27	195	13.8	390	6 Q95K13	Q95K13 macaca fasc
28	194.5	13.7	319	6 Q9TU80	Q9TU80 canis famil
29	194	13.7	372	13 Q90Y50	Q90Y50 brachydanio
30	190.5	13.4	344	4 Q9UKV4	Q9UKV4 homo sapien
31	190.5	13.4	365	6 Q8MWV3	Q8MWV3 bos taurus
32	188	13.3	430	4 Q8N4F1	Q8N4F1 homo sapien
33	186	13.1	773	5 Q81RS5	Q81RS5 drosophila
34	183	12.9	300	11 Q9DA22	Q9DA22 mus musculus
35	183	12.9	300	11 Q9D9J0	Q9D9J0 mus musculus
36	181	12.8	319	6 Q9TU79	Q9TU79 sus scrofa
37	180	12.7	352	11 Q91W66	Q91W66 mus musculus
38	180	12.7	365	11 Q9DBJ8	Q9DBJ8 mus musculus
39	179.5	12.7	304	11 Q9CVA4	Q9CVA4 mus musculus
40	179.5	12.7	323	4 Q8NDD2	Q8NDD2 homo sapien
41	177	12.5	284	4 Q9NX42	Q9NX42 homo sapien
42	177	12.5	325	4 Q95791	Q95791 homo sapien
43	177	12.5	327	4 Q96IQ7	Q96IQ7 homo sapien
44	175.5	12.4	328	11 Q92109	Q92109 mus musculus
45	174	12.3	344	11 Q9R067	Q9R067 rattus norv

ALIGNMENTS

RESULT 1

Q9J159	PRELIMINARY;	PRT;	298 AA.
AC Q9J159			
DT 01-OCT-2000	(TRENBLrel. 15, Created)		
DT 01-OCT-2000	(TRENBLrel. 15, Last sequence update)		
DT 01-MAR-2003	(TRENBLrel. 23, Last annotation update)		
DE	Vascular endothelial junction-associated molecule (Junctional adhesion molecule-3) (2410030G21RIK protein).		
GN	JCAM3 OR JCAM2 OR JAM-3 OR 2410030G21RIK.		
OS	Mus musculus (Mouse)		
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;		
OC	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.		
OX	NCBI_TaxID=10090;		
RN	[1]		
RP	SEQUENCE FROM N.A.		
RC	STRAIN=C57BL/6J;		
EX	MEDLINE=20317114; PubMed=10779521;		
RA	Palmeri D., van Zante A., Huang C.-C., Hemmerich S., Rosen S.D.;		
RT	"Vascular Endothelial Junction-associated Molecule, a Novel Member of the Immunoglobulin Superfamily, Is Localized to Intercellular Boundaries of Endothelial Cells."		
RL	J. Biol. Chem. 275:19139-19145(2000).		
RN	[2]		
RP	SEQUENCE FROM N.A.		
RC	PubMed=11036763;		
EX	Aurand-Lions M.A., Duncan L., Du Pasquier L., Imhof B.A.;		
RT	"Cloning of JAM-2 and JAM-3: an Emerging Junctional Adhesion Molecular Family?"		
RL	Curr. Top. Microbiol. Immunol. 251:91-98(2000).		
RN	[3]		
RP	SEQUENCE FROM N.A.		
RC	STRAIN=C57BL/6J; TISSUE=Embryo, and Embryonic stem cells;		
EX	MEDLINE=21085660; PubMed=11217851;		
RA	Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,		
RT	Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,		
RL	Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamana I.,		
RN	Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,		
RA	Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,		

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RA Fleischmann W., Gaasterland T., Giesi C., King B., Kochiwa H.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaide I., Pesole G., Quackenbush J.,
RA Schriml L.M., Scubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Lyons P., Marchionni L., Maehima J., Mazzarelli J., Mombaerts P.,
RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Suzuki H., Toyooka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
RA Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
RA Hayaishizaki Y.;
RT "Functional annotation of a full-length mouse cDNA collection.";
RL Nature 409:685-690(2001).
DR EMBL; AF255911; AACF81224.1; -.
DR EMBL; AJ291757; CAF20699.1; -.
DR EMBL; AK013914; BAB29053.1; -.
DR EMBL; AK010616; BAB27064.1; -.
DR MGD; MGI:1933820; Jcam2.
DR MGD; MGI:1933825; Jcam3.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003006; Ig_MHC.
DR Pfam; PF00047; Ig; 2.
DR PROSITE; PS00835; IG_LIKE; 2.
SQ SEQUENCE 298 AA; 33047 MW; 1124E0F07E6CF751 CRC64;

Query Match      81.7%; Score 1159; DB 11; Length 298;
Best Local Similarity 80.1%; Pred. No. 6.5e-100;
Matches 222; Conservative 22; Mismatches 31; Indels 2; Gaps 2;

QY 1 YHKAYGFSAPKD-QQVTVAVYQAEILACKTPKKTVKSRLWKLGSRVSFVYQQTLOG 59
DB 23 YHKANGFSASKDHRQEVTVIEFQAEILACKTPKKTSSRLEWKVGQVSLVYQQALOG 82

QY 60 DFKNRAEMIDFNIRIKNVTRSDAGKYRCVAPSQGNLEEDTDTLEVLVAPVPSCEV 119
DB 83 DFKDRAEMIDFNIRIKNVTRSDAGEYRCVAPSQGNLEEDTDTLEVLVAPVPSCEV 142

QY 120 PSSALSGTVVELRCQDKEGNPAPEYTFWFKDGIIRLLENPRLGSGSTNSSTYMTKTGTLOF 179
DB 143 PTVMTGVSVELRCQDKEGNPAPEYTFWFKDGIIRLLENPRLGSGSTNSSTYMTKTGTLOF 201

QY 180 NTVSKLDTGEYSCEARNVGYRCPCPKRMQVDDNLISGIIAAVVALVISVCGLGVCYA 239
DB 202 NMISKWDSGEYCEARNVGYRCPCPKRMQVDDNLISGIIAAVVALVISVCGLGVCYA 261

QY 240 QRKGYSKETSFKQKSNSSKATMTSENDFKHTKSFII 276
DB 262 QRKGYSKETSFKQKSPASKVTMTSENDFKHTKSFII 298

RESULT 2
QSC95
ID Q8C95 PRELIMINARY; PRT; 298 AA.
AC Q8C95;
DT 01-MAR-2003 (Tremblrel. 23, Created)
DT 01-MAR-2003 (Tremblrel. 23, Last sequence update)
DE Junction cell adhesion molecule 2.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxId=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Medulla oblongata;
RX MEDLINE=22354683; PubMed=12466851;
RA The FANTOM Consortium,
RT "Analysis of the mouse transcriptome based on functional annotation of
RL Nature 420:563-573(2002).
DR EMBL; AK078128; BAC37139.1; -.
SQ SEQUENCE 298 AA; 33182 MW; 1131F0BFD99CEB51 CRC64;

Query Match      81.5%; Score 1156; DB 11; Length 298;
Best Local Similarity 80.1%; Pred. No. 1.2e-99;
Matches 222; Conservative 22; Mismatches 31; Indels 2; Gaps 2;

QY 1 YHKAYGFSAPKD-QQVTVAVYQAEILACKTPKKTVKSRLWKLGSRVSFVYQQTLOG 59
DB 23 YHKANGFSASKDHRQEVTVIEFQAEILACKTPKKTSSRLEWKVGQVSLVYQQALOG 82

QY 60 DFKNRAEMIDFNIRIKNVTRSDAGKYRCVAPSQGNLEEDTDTLEVLVAPVPSCEV 119
DB 83 DFKDRAEMIDFNIRIKNVTRSDAGEYRCVAPSQGNLEEDTDTLEVLVAPVPSCEV 142

QY 120 PSSALSGTVVELRCQDKEGNPAPEYTFWFKDGIIRLLENPRLGSGSTNSSTYMTKTGTLOF 179
DB 143 PTVMTGVSVELRCQDKEGNPAPEYTFWFKDGIIRLLENPRLGSGSTNSSTYMTKTGTLOF 201

QY 180 NTVSKLDTGEYSCEARNVGYRCPCPKRMQVDDNLISGIIAAVVALVISVCGLGVCYA 239
DB 202 NMISKWDSGEYCEARNVGYRCPCPKRMQVDDNLISGIIAAVVALVISVCGLGVCYA 261

QY 240 QRKGYSKETSFKQKSNSSKATMTSENDFKHTKSFII 276
```



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DR Pfam: PF00047; ig; 2.
DR SMART: SM00408; IGC2; 1.
DR PROSITE: PS0835; IG_LIKE; 2.
KW Immunoglobulin domain.
SQ SEQUENCE 310 AA; 34855 MW; C74984EABE234680 CRC64;

Query Match      34.3%; Score 486.5; DB 11; Length 310;
Best Local Similarity 39.1%; Pred. No. 4.1e-37;
Matches 104; Conservative 54; Mismatches 97; Indels 11; Gaps 6;

QY 21 YQAILAC-KTPKKTVXSRLEWKKL-GRSVSFVYQOTLQGDPKNRAEMI-DFNIRIKNV 77
   :::::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
Db 46 FESVELSCIITDSQSDPRIEWKKIQDQGTYYVFNKIQGLAGRTDVFGKTSLRINWV 105
   :::::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
QY 78 TRSDAGKYRCEVSAPSEQGNLEEDTVTLVLVAPVAPVCEVPSSALSCTVVELRCODKE 137
   ||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db 106 TRSDSAIYRCEVVALNDR-KEVDEITIELIVQKVPVPCRIPAAPVPGKTATLQCOESE 164
   ||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
QY 138 GNPAPETWFKDGIRLLENPRLGQSQTNSSTYMTNTKTGLQFNTVSKLDTGEYSCEARN 197
   ||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db 165 GYPRPHNYRNDVPLPTDSRANPRFQNSSFHVSETGLVFNVAHVHDKDGGQYYCIASND 224
   ||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
QY 198 VGYRCPGKRMQVDDLNISGIIAAVVALVLSVCGLVGYCAQRKGYF--SKE-----TS 250
   ||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db 225 AGAARCEQDMVEYDNLNAGIIGGLVVLVLAVITMGICCAVRRGCFISSKQDGESYKS 284
   ||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
QY 251 FOKSNSSSKATTMSNDPKHTKSFII 276
   ||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db 285 PGKHGQVNYRTSEGDPRHKSFSVI 310
   ||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:

RESULT 6
Q9D1M9
ID Q9D1M9 PRELIMINARY; PRT; 310 AA.
AC Q9D1M9
DT 01-JUN-2001 (TrEMBLrel. 17, Created)
DT 01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE 1110002N23Rik protein.
GN JCAM3 OR JCAM2 OR 1110002N23Rik.
OS Mus musculus (Mouse)
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Embryo;
RX MEDLINE=21085860; PubMed=11217851;
RA Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
RA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Suzuki H., Toyooka K., Wang K.H., Weitz C., Whitaker C., Wilming L.,
RA Wyshew-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
RA Hayashizaki Y.
RT "Functional annotation of a full-length mouse cDNA collection.";
RL Nature 409:685-690(2001).
DR EMBL; AK003326; BAB22715.1; -.
DR MGD; MGI:1933820; Jcam3.
DR MGD; MGI:1933825; Jcam3.
DR InterPro; IPR007110; IG-like.
DR InterPro; IPR003598; IG_L2.

DR InterPro; IPR003006; Ig_MHC.
DR Pfam: PF00047; ig; 2.
DR SMART: SM00408; IGC2; 1.
DR PROSITE: PS0835; IG_LIKE; 2.
KW Immunoglobulin domain.
SQ SEQUENCE 310 AA; 34819 MW; 6692BCAD68EA4B1D CRC64;

Query Match      34.2%; Score 484.5; DB 11; Length 310;
Best Local Similarity 39.1%; Pred. No. 6.2e-37;
Matches 104; Conservative 55; Mismatches 96; Indels 11; Gaps 6;

QY 21 YQAILAC-KTPKKTVXSRLEWKKL-GRSVSFVYQOTLQGDPKNRAEMI-DFNIRIKNV 77
   :::::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
Db 46 FESVELSCIITDSQSDPRIEWKKIQDQGTYYVFNKIQGLAGRTDVFGKTSLRINWV 105
   :::::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
QY 78 TRSDAGKYRCEVSAPSEQGNLEEDTVTLVLVAPVAPVCEVPSSALSCTVVELRCODKE 137
   ||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db 106 TRSDSAIYRCEVVALNDR-KEVDEITIELIVQKVPVPCRIPAAPVPGKTATLQCOESE 164
   ||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
QY 138 GNPAPETWFKDGIRLLENPRLGQSQTNSSTYMTNTKTGLQFNTVSKLDTGEYSCEARN 197
   ||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db 165 GYPRPHYSYRNDVPLPTDSRANPRFQNSSFHVSETGLVFNVAHVHDKDGGQYYCIASND 224
   ||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
QY 198 VGYRCPGKRMQVDDLNISGIIAAVVALVLSVCGLVGYCAQRKGYF--SKE-----TS 250
   ||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db 225 AGAARCEQDMVEYDNLNAGIIGGLVVLVLAVITMGICCAVRRGCFISSKQDGESYKS 284
   ||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
QY 251 FOKSNSSSKATTMSNDPKHTKSFII 276
   ||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db 285 PGKHGQVNYRTSEGDPRHKSFAVI 310
   ||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:

RESULT 7
Q96FL1
ID Q96FL1 PRELIMINARY; PRT; 309 AA.
AC Q96FL1
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE Hypothetical protein (Fragment).
OS Homo sapiens (Human)
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Eye;
RA Strausberg R.;
RL Submitted (JUL-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; BC010690; AAH0690.1; -.
DR InterPro; IPR007110; IG-like.
DR InterPro; IPR003598; IG_L2.
DR InterPro; IPR003006; Ig_MHC.
DR Pfam; PF00047; ig; 2.
DR SMART; SM00408; IGC2; 1.
DR PROSITE; PS0835; IG_LIKE; 2.
KW Hypothetical protein; Immunoglobulin domain.
FT NON_TER
SQ SEQUENCE 309 AA; 34917 MW; 50C5B1B7872B8DF3 CRC64;

Query Match      33.7%; Score 477.5; DB 4; Length 309;
Best Local Similarity 38.0%; Pred. No. 2.8e-36;
Matches 101; Conservative 57; Mismatches 97; Indels 11; Gaps 7;

QY 21 YQAILAC-KTPKKTVXSRLEWKKL-GRSVSFVYQOTLQGDPKNRAEMI-DFNIRIKNV 77
   :::::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
Db 45 FESVELSCIITDSQSDPRIEWKKIQDQGTYYVFNKIQGLAGRTDVFGKTSLRINWV 104
   :::::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
QY 78 TRSDAGKYRCEVSAPSEQGNLEEDTVTLVLVAPVAPVCEVPSSALSCTVVELRCODKE 137
   ||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db 105 TRDSALYRCEVVALNDR-KEIDIVIELTVRVKVPVPCRIPAAPVPGKTATLQCOESE 163
   ||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
QY 138 GNPAPETWFKDGIRLLENPRLGQSQTNSSTYMTNTKTGLQFNTVSKLDTGEYSCEARN 197
   ||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
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Db 164 GHPHYSWYRNDVPLPTDSRANPRNSFHLNSETGLVFTAVHKDDSGQYCIASND 223
QY 198 VGYRRCPGKRMQVDDNLNIGIIAAVVALVISVCGLGVCYAQRKGYF--SKE--TSFQ- 252
Db 224 AGSARCEQEEMEVVDNLNIGGIVLVAVLALITLIGICCAVRRGYFINNKODGESYKN 283
QY 253 --KSNSSSKATTMSNDPKHTKSFII 276
Db 284 PGKPDGVNYIRTDEGDFRHKSFVI 309

RESULT 8

Q9BX67
ID Q9BX67 PRELIMINARY; PRT; 310 AA.
AC Q9BX67;
DT 01-JUN-2001 (T-EMBLrel. 17, Created)
DT 01-JUN-2001 (T-EMBLrel. 17, Last sequence update)
DT 01-MAR-2003 (T-EMBLrel. 23, Last annotation update)
DE Junctional adhesion molecule 3 precursor (Junctional adhesion molecule-2) (Junctional adhesion molecule-3) (Hypothetical protein FLJ90288) (Hypothetical protein FLJ90828).
DE GN JAM-2 OR JAM3
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RA Cunningham S.A., Arrate M.P., Tran T.M.;
RT "Cloning of Human Junctional Adhesion Molecule 3."
RL Submitted (MAR-2001) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RA Aurrand-Lions M.A., Johnson-leger C., Wong C., DuPasquier L.;
RT "Heterogeneity of endothelial junctions is reflected by differential expression and specific subcellular localization of the three JAM family members."
RL Submitted (AUG-2001) to the EMBL/GenBank/DBJ databases.
RN [3]
RP SEQUENCE FROM N.A.
RA Aurrand-Lions M.A., Johnson-leger C., Lamagna C., Ozaki H., Kita T.;
RT "Junctional adhesion molecules (JAMs) and interendothelial junctions."
RL Submitted (AUG-2001) to the EMBL/GenBank/DBJ databases.
RN [4]
RP SEQUENCE FROM N.A.
RA Sachs U.J.H., Eva O., Berghoefer H., Santoso S.;
RT "Characterization of Junctional Adhesion Molecule-3 on Human Platelets: A New Member of Immunoglobulin Superfamily."
RL Submitted (NOV-2001) to the EMBL/GenBank/DBJ databases.
RN [5]
RP SEQUENCE FROM N.A.
RA Isogai T., Ota T., Nishikawa T., Hayashi K., Otsuki T., Sugiyama T., Suzuki Y., Nagai K., Sugano S., Ishii S., Kawai-Hio Y., Saito K., Yanamoto J., Wakamatsu A., Nakamura Y., Kojima S., Nagahari K., Masuho Y., Ono T., Okano K., Yoshikawa Y., Aotsuka S., Sasaki N., Hattori A., Okumura K., Iwayanagi T., Ninomiya K.;
RT "NEDO human cDNA sequencing project."
RL Submitted (MAR-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF356518; AAK27221.1; -
DR EMBL; AJ344431; CAC69845.1; -
DR EMBL; AF448478; AAM20925.1; -
DR EMBL; AK074769; BAC11195.1; -
DR EMBL; AK075309; BAC11538.1; -
DR InterPro; IPR007110; IG-like.
DR Pfam; PF00047; Ig; 2.
DR PROSITE; PS50835; IG_LIKE; 2.
KW Immunoglobulin domain.
FT CHAIN 76 355
SQ SEQUENCE 310 AA; 35020 MW; CE39ADF33EA1DAB9 CRC64;

Query Match 33.7%; Score 477.5; DB 4; Length 310;
Best Local Similarity 38.0%; Pred. No. 2.8e-36;
Matches 101; Conservative 57; Mismatches 97; Indels 11; Gaps 7;
QY 21 YQEAAILAC-KTPPKTVKSRLEWKKL-GRSVSVFYVYQOTLQDGFKNRAEMI-DFNIRIKNV 77
Db 46 FESVELSCIITDSQTSDPRIEWKKIQDEQTYVFFDNKIQGDLAGRAEILGKTSLKINWV 105
QY 78 TRSDAGKYRCEVSAPSEQQNLEEDTVTLVAVAPVSPCEVPSSALSGTVVLRCDQKE 137
Db 106 TRRDSALYRCEVVARNDR-KEIDEIVIELTVQKVPVPCRVKAVPVGKMATLHCQESE 164
QY 138 GNPAPETWFKDGIIRLENPRLGSSQTSNYSYTNKTKTLOFNTVSKLDTGEYSCARN 197
Db 165 GHPHYSWYRNDVPLPTDSRANPRNSFHLNSETGLVFTAVHKDDSGQYCIASND 224
QY 198 VGYRRCPGKRMQVDDNLNIGIIAAVVALVISVCGLGVCYAQRKGYF--SKE--TSFQ- 252
Db 225 AGSARCEQEEMEVVDNLNIGGIVLVAVLALITLIGICCAVRRGYFINNKODGESYKN 284
QY 253 --KSNSSSKATTMSNDPKHTKSFII 276
Db 285 PGKPDGVNYIRTDEGDFRHKSFVI 310
RESULT 9
Q8WML8
ID Q8WML8 PRELIMINARY; PRT; 355 AA.
AC Q8WML8;
DT 01-MAR-2002 (T-EMBLrel. 20, Created)
DT 01-MAR-2002 (T-EMBLrel. 20, Last sequence update)
DT 01-MAR-2003 (T-EMBLrel. 23, Last annotation update)
DE Junction adhesion molecule 3.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Hearn T.;
RL Submitted (OCT-2001) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RA Phillips H.M.;
RT "Narrowing the critical region within 11q24-qter for hypoplastic left heart and identification of a candidate gene, JAM3, expressed during cardiogenesis."
RL Submitted (FEB-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AJ416101; CAC94776.1; -
DR Genew; HGNC:15532; JAM3.
DR InterPro; IPR007110; IG-like.
DR InterPro; IPR003598; IG_C2.
DR InterPro; IPR003006; IG_MHC.
DR Pfam; PF00047; Ig; 2.
DR SMART; SM00408; IgC2; 1.
DR PROSITE; PS50835; IG_LIKE; 2.
KW Immunoglobulin domain.
FT CHAIN 76 355
SQ SEQUENCE 355 AA; 39602 MW; 8B1577DEA7BD1D4F8 CRC64;
Query Match 33.7%; Score 477.5; DB 4; Length 355;
Best Local Similarity 38.0%; Pred. No. 3.4e-36;
Matches 101; Conservative 57; Mismatches 97; Indels 11; Gaps 7;
QY 21 YQEAAILAC-KTPPKTVKSRLEWKKL-GRSVSVFYVYQOTLQDGFKNRAEMI-DFNIRIKNV 77
Db 91 FESVELSCIITDSQTSDPRIEWKKIQDEQTYVFFDNKIQGDLAGRAEILGKTSLKINWV 150
QY 78 TRSDAGKYRCEVSAPSEQQNLEEDTVTLVAVAPVSPCEVPSSALSGTVVLRCDQKE 137
Db 151 TRRDSALYRCEVVARNDR-KEIDEIVIELTVQKVPVPCRVKAVPVGKMATLHCQESE 209

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QY 138 GNPAPETWFKDGIIRLLENPRLSQSTNSSTYMTNTKTGLQNTVTSKLDTGYSCEARN 197
DB 210 GHPRPHTSWYRNDVPLPTDSRANFRNSSFHLNSETGLVFTAVHKDDSGQYICIASND 269
QY 198 VGYRRCGKRMQVDDNLSIGIIIAVVALVVSGLGVCVAQRKGYF--SKE--TSFQ- 252
DB 270 AGSARCEQEMEYVDLNGIGGIIGVLVLAVALITLIGICCAVRGYPFINNKQDGESYKN 329
QY 253 --KSNSSSKATTMSNDPKHTKSFII 276
DB 330 GPKPDGVNYIRTDEGDFRHKSSFVI 355

RESULT 10
Q9CWD9 PRELIMINARY; PRT; 181 AA.
AC Q9CWD9;
DT 01-JUN-2001 (TrEMBLrel. 17, Created)
DT 01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
DE Hypothetical protein (Junction cell adhesion molecule 2)
GN JCAM2 OR 2410167M24RIK.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Embryonic stem cells;
RX MEDLINE=21085660; PubMed=11217851;
RA Kawai J., Shingawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
RA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Fleischmann W., Gaasterland T., Giesi C., King B., Kochiwa H.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaide I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staudl F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Suzuki H., Toyooka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
RA Wyshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohsaki S.,
RA Hayashizaki Y.;
RT "Functional annotation of a full-length mouse cDNA collection.";
RL Nature 409:685-690(2001).
RN [2]
SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J;
RX MEDLINE=22354683; PubMed=12466851;
RA The FANTOM Consortium,
RA the RIKEN Genome Exploration Research Group Phase I & II Team;
RT "Analysis of the mouse transcriptome based on functional annotation of
60,770 full-length cDNAs.";
RL Nature 420:563-573(2002).
DR EMBL; AK010826; BAB27208.1; -
DR EMBL; AK045095; BAC32219.1; -
DR MGD; MGI:1933820; Jcsm2.
DR InterPro; IPR003599; Ig.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003006; Ig_MHC.
DR Pfam; PF00047; Ig_1.
DR SMART; SM00409; IG_1.
DR PROSITE; PS50835; IG LIKE; 1.
SQ SEQUENCE 181 AA; 20330 MW; 603B6114FBB11AEB CRC64;

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Query Match 31.8%; Score 451.5; DB 11; Length 181;
 Best Local Similarity 80.0%; Pred. No. 3.6e-34;

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Matches 88; Conservative 9; Mismatches 12; Indels 1; Gaps 1;
QY 1 YHKAYGSAKPD-QQVTVAVXYQEAIIACKTPKTVSRLEWKKLGRSVSFVYQOITLQ 59
DB 23 YHKANGFSASKDRHQEVTVTFEQEAIIACKTPKTVSRLEWKKVGGVSLVYVQALQ 82
QY 60 DFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQONLEEDTVTTLVL 109
DB 83 DFKDRAEMIDFNIRIKNVTSDAGEYRCEVSAPTEQQONLEQDKMVLVL 132

RESULT 11
Q8VC39 PRELIMINARY; PRT; 300 AA.
AC Q8VC39;
DT 01-MAR-2002 (TrEMBLrel. 20, Created)
DT 01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
DE Hypothetical protein (Junction cell adhesion molecule1).
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
SEQUENCE FROM N.A.
RC TISSUE=Breast tumor;
RA Strausberg R.;
RL Submitted (JAN-2002) to the EMBL/GenBank/DBJ databases.
RN [2]
SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Cecum;
RX MEDLINE=22354683; PubMed=12466851;
RA The FANTOM Consortium,
RA the RIKEN Genome Exploration Research Group Phase I & II Team;
RT "Analysis of the mouse transcriptome based on functional annotation of
60,770 full-length cDNAs.";
RL Nature 420:563-573(2002).
DR EMBL; BC021876; AAB21876.1; -
DR EMBL; AK033574; BAC28369.1; -
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003006; Ig_MHC.
DR InterPro; IPR003596; Ig_v.
DR Pfam; PF00047; Ig_2.
DR SMART; SM00406; IGv; 1.
DR PROSITE; PS50835; IG LIKE; 2.
KW Hypothetical protein.
SQ SEQUENCE 300 AA; 32423 MW; 3CB561E8FF3B97EC CRC64;

Query Match 28.9%; Score 410; DB 11; Length 300;
Best Local Similarity 35.9%; Pred. No. 5.4e-30;
Matches 99; Conservative 49; Mismatches 116; Indels 12; Gaps 6;
QY 7 FSAPKQQVTVAVXYQEAIIACKTPKTVSRLEWKKL-GRSVSFVYQOITLQGFKNRA 65
DB 31 YTAQSDVQVPE---NESIKLTCTYSGFSPRVEKFKVGGSTALVCYNSQITAPYADV 86
QY 66 EMIDFNIRIKNVTSDAGKYRCEVSAPSEQQONLEEDTVTTLVLVAPVPSCEVPSSALS 125
DB 87 TFSGGITFSSVTRKDNGEYTCWS--EAGGQNYGEVSIHLTVLVPSPKPTISVPSVVTI 144
QY 126 GTTVELRCQDKGNPAPETWFKDGIIRLLENPRLSQS--TNSSYTMNTKTGLQNTVTSK 184
DB 145 GNRVLVTCSEHDGSPPSSEYFWKDGISMLTADAKKTRAFMNSSFTIDPKSGDLIDPVT 204
QY 185 LDTGEYSCEARNVSG-YRRCFGKRMQVDDNLSIGIIIAVVALVVSGLGVCVAQRK 243
DB 205 FDSGEYVCAQNGYGTAMRSEAAHMDAVELNVGGIVAAVLVTLILLGLLFGVWFAYS 264
QY 244 YF---SKETSFKNSGSKATMTSENDFKHTKSFII 276
DB 265 YFETKTKTAPGKKVIYQSPSTRSEGEFKQTSFLV 300

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RESULT 15
Q9PWR4 PRELIMINARY; PRT; 335 AA.
ID Q9PWR4; AC Q9PWR4; DT 01-MAY-2000 (TReMBLrel. 13, Created)
DT 01-MAY-2000 (TReMBLrel. 13, Last sequence update)
DT 01-MAR-2003 (TReMBLrel. 23, Last annotation update)
DE Chrl thymocyte antigen precursor.
GN Chrl.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
SEQUENCE FROM N.A.
RC STRAIN=H.B19; TISSUE=Thymus;
RA Kitevuo K.H., Boyd R., Gobel T.T., Bean A., Dunon D., Imhof B.A.,
RA Vainio O.;
"ChTl1, a new IgSF member inhibits thymocyte differentiation at the
RT double positive stage.";
RL Submitted (JUN-1997) to the EMBL/GenBank/DBJ databases.
DR EMBL; Y14064; CAA74391.1; -.
DR HSPG; P06907; INEU.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003006; Ig_MHC.
DR InterPro; IPR003596; Ig_V.
DR Pfam; PF00047; Ig; 2.
DR SMART; SM00406; IG; 1.
DR PROSITE; PS50835; IG_LIKE; 2.
KW Signal.
FT SIGNAL 1 21 POTENTIAL.
FT CHAIN 22 335 ChT1 THYMOCYTE ANTIGEN.
SQ SEQUENCE 335 AA; 36509 MW; AA6159596079B438 CRC64;

Query Match 15.9%; Score 225; DB 13; Length 335;
Best Local Similarity 24.1%; Pred. No. 1.2e-12;
Matches 75; Conservative 45; Mismatches 101; Indels 90; Gaps 10;

QY 5 YGSAPKQQVVTAVXYQBAILACKTPKTVKSLEWKLGSRVSFVYYOQTLOGDFNKR 64
Db : : : : : : : : : : : : : : : : : : : : : : : : : : : :
58 WSFYSAKESQLHTIYYYS-----QSYSY-----GEFKDR 88

QY 65 AEMI----DNIRIKNTVRSDAGKYRCEVSAPS EQ--GNLEEDVTTLVLVAPVPSCV 119
: : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 89 ITAATSPGNASITISNNQPSDTSYGTCVFSPPQDAGQS--QKSVIVNLVKSKPFCKI 146
: : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 120 PSSALSGTVVELRCQDKEGNPAPETWFGDIRLLENFRLGSTNSSYTWNTKTGLQF 179
: : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 147 EGTPKGHLIYLKCKDOGLPHPTRYKYKDENTL-----TPVTFYNPD TGILYI 197
: : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 180 NTYSKLDTGYSCEARNSVGRRCPGKMVD-----DLNI--SGIIAAVVVALVISV 231
: : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 198 GNLTTFETGHYRCIASINMGNSTC-----ELDTSMHSDGNI VAGALIGALAAVIICAI 252
: : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 232 CGLGVCVYAQRKGFFSKE-----TSFOKSNSSSK 259
: : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 253 VWVLTKAKKKSSNMQMVAQKSNAEYAQVNPNEENTPATVLP SNATNQPSADEAA 312
: : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 260 ATTMSENDFKH 270
| | | | |
313 APETPENDEKX 323
| | | | |

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Search completed: December 9, 2003, 17:13:00
Job time : 29.8118 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: December 9, 2003, 17:26:03 ; Search time 41.3519 Seconds
(without alignments)
1059.408 Million cell updates/sec

Title: US-09-852-797-76_COPY_23_298

Perfect score: 276

Sequence: 1 YHKAYGSPKQOQVTVAVX.....SSKATTMSDFKHTKSFII 276

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 1107863 seqs, 158726573 residues

Word size: 30

Total number of hits satisfying chosen parameters: 40

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : A_Geneseq 19Jun03.*

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22: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA2001.DAT.*
23: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA2002.DAT.*
24: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA2003.DAT.*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	274	99.3	298	19	AAW75220 Human secreted pro
2	274	99.3	298	23	AAE26983 Human gene 25 enco
3	274	99.3	298	23	AAE27121 Human gene 25 enco
4	274	99.3	298	24	ABR47926 Human secreted pro
5	274	99.3	298	24	ABU64994 Human secreted pro
6	274	99.3	298	24	ABR00172 Human gene 162 enc
7	240	87.0	298	19	AAW85457 Secreted protein a
8	240	87.0	298	22	AAU00512 Human junctional a
9	240	87.0	298	23	ABP61801 Human polypeptide

10	240	87.0	298	24	AAO16452 Human junctional a
11	230	83.3	312	20	AAV08060 Human PRO245 prote
12	230	83.3	312	20	AAV23324 A33 related anige
13	230	83.3	312	20	AAV13354 Amino acid sequenc
14	230	83.3	312	21	AAV33421 Human PRO245 prote
15	230	83.3	312	21	AAV24401 Human PRO245 prote
16	230	83.3	312	21	AAV70668 Human PRO245 prote
17	230	83.3	312	22	AAU12339 Human PRO245 polyp
18	230	83.3	312	22	AAU00821 Human immune respo
19	230	83.3	312	22	AAV80222 Human PRO245 prote
20	230	83.3	312	22	AAV50904 Human PRO245 prote
21	230	83.3	312	22	AAV53081 Human angiogenesis
22	230	83.3	312	24	ABU69632 Novel human secret
23	230	83.3	312	24	ABU71455 Human PRO polypept
24	230	83.3	312	24	ABU71901 Human secreted/tra
25	230	83.3	312	24	ABU07738 Human A-33 related
26	230	83.3	312	24	ABU66737 Human PRO polypept
27	230	83.3	312	24	ABU67013 Human secreted/tra
28	230	83.3	312	24	ABU67355 Human secreted pro
29	230	83.3	312	24	ABU59818 Novel secreted and
30	230	83.3	312	24	ABU64509 Human secreted/tra
31	230	83.3	312	24	ABU54357 Human secreted/tra
32	222	80.4	222	22	AAW41947 Human polypeptide
33	215	77.9	215	22	AAV70500 Angiogenesis prote
34	183	66.3	213	21	AAV32727 Human confuency r
35	166	60.1	303	22	AAV23693 Human EST encoded
36	107	38.8	107	22	AAV40161 Human polypeptide
37	89	32.2	388	22	ABG22341 Novel human diagno
38	73	26.4	140	22	ABG22338 Novel human diagno
39	69	25.0	69	22	ABG22339 Novel human diagno
40	51	18.5	66	22	ABG22340 Novel human diagno

ALIGNMENTS

RESULT 1

AAW75220
ID AAW75220 standard; Protein; 298 AA.
XX
AC AAW75220;
XX
DT 29-JAN-1999 (first entry)
XX
DE Human secreted protein encoded by gene 25 clone HTEB42.

XX Human; secreted protein; fusion protein; gene therapy, protein therapy;
KW diagnosis; tissue; cancer; tumour; neurodegenerative disorder; leukaemia;
KW developmental abnormality; foetal deficiency; blood; allergy; renal;
KW immune system; asthma; lymphocytic disease; brain; hepatic; lymphoma;
KW inflammation; ischaemic shock; Alzheimer's disease; restenosis; AIDS;
KW cognitive disorder; schizophrenia; prostate; obesity; osteoclast; thymus;
KW osteoporosis; arthritis; testis; lung; thyroiditis; thyroid; digestion;
KW endocrine; metabolism; regulation; malabsorption; gastritis; neoplasm.

XX Homo sapiens.

XX Key Location/Qualifiers

FT Misc-difference 42 /label= unknown

FT Misc-difference 58 /label= unknown

FT Misc-difference 58 /label= unknown

XX WO9840483-A2.

XX 17-SEP-1998.

XX 12-MAR-1998; 98WO-US04858.

XX 19-DEC-1997; 97US-0068368.

XX 14-MAR-1997; 97US-0040710.

XX 14-MAR-1997; 97US-0040762.

XX 30-MAY-1997; 97US-0048100.

PR 30-MAY-1997; 97US-0048189.
PR 30-MAY-1997; 97US-0048357.
PR 30-MAY-1997; 97US-0050934.
PR 06-JUN-1997; 97US-0048970.
PR 05-SEP-1997; 97US-0057765.
XX (HUMA-) HUMAN GENOME SCI INC.
XX
PI Ferrie AM, Fischer CL, Gentz RL, Greene JM, Kyaw H;
PI Li H, Li Y, Moore PA, Rosen CA, Ruben SM, Soppet DR;
PI Wei YF, Young PB, Zeng Z;
XX WPI; 1998-520811/44.
DR N-PSDB; AAV34310.
XX
XX Isolated human poly:nucleotide(s) encoding secretory peptide(s) -
PT used to develop products for the diagnosis and treatment of e.g.
PT inflammation, cancers, CNS disorders or immune system disorders
XX
XX Claim 1; Page 168-169; 201pp; English.
XX
XX This sequence represents a secreted human protein encoded by the gene
CC clone detailed in the descriptor line. The gene can be used to generate
CC fusion proteins by linking to the gene to a human immunoglobulin Fc
CC portion (e.g. AAV34277) for increasing the stability of the fused
CC protein as compared to the human protein only.
CC The invention relates to 28 novel genes and their fragments (nucleic
CC acid sequences: AAV34286-V34325; amino acid sequences AAW75196-W75235)
CC which are useful for preventing, treating or ameliorating medical
CC conditions e.g. by protein or gene therapy. Also, pathological
CC conditions can be diagnosed by determining the amount of the new
CC polypeptides in a sample or by determining the presence of mutations in
CC the new polynucleotides. Specific uses are described for each of the 28
CC polynucleotides, based on which tissues they are most highly expressed in
CC (see AAV34286 for described uses).
XX
SQ Sequence 298 AA;
Query Match 99.3%; Score 274; DB 19; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.2e-260;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 YHKAYGFSAPKQDQVTVAVXQEAILACKTPKTVXSRLEWKLGSRVSFVYQQTQGD 60
DB 23 YHKAYGFSAPKQDQVTVAVXQEAILACKTPKTVXSRLEWKLGSRVSFVYQQTQGD 82
QY 61 FQNAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSQGNLEEDTTLVLVAPVPSCEVP 120
DB 83 FQNAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSQGNLEEDTTLVLVAPVPSCEVP 142
QY 121 SSALSGTVVELRCODKEGNPAPEYTWFKDGIIRLLENPRIGSQSTNSSTYNTKTGTLOFN 180
DB 143 SSALSGTVVELRCODKEGNPAPEYTWFKDGIIRLLENPRIGSQSTNSSTYNTKTGTLOFN 202
QY 181 TVSKLDTGEYSCEARNVGVYRCRPGKRMQVDDLNISGIIAAVVVVALVISVCGLGVCYQAQ 240
DB 203 TVSKLDTGEYSCEARNVGVYRCRPGKRMQVDDLNISGIIAAVVVVALVISVCGLGVCYQAQ 262
QY 241 RKGYSKTSFQKSNSSSKATTMSNDPKHTKSPII 276
DB 263 RKGYSKTSFQKSNSSSKATTMSNDPKHTKSPII 298
RESULT 2
ID AAE26983
XX AAE26983 standard; Protein; 298 AA.
XX
XX AAE26983;
XX
DT 13-DEC-2002 (first entry)
XX
DE Human gene 25 encoded secreted protein HTEEB42, SEQ ID NO:76.
XX

KW Human; immunodeficiency; X-linked agammaglobulinaemia; septic shock;
KW autoimmune disorder; rheumatoid arthritis; multiple sclerosis; cancer;
KW Grave's disease; diabetes mellitus; haematopoietic disorder; stroke;
KW respiratory disorder; asthma; allergy; gastrointestinal disorder;
KW inflammatory bowel disease; neurodegenerative disorder; hepatitis;
KW Parkinson's disease; Alzheimer's disease; cardiovascular disorder;
KW atherosclerosis; myocarditis; renal disorder; fungicide; virucide;
KW hyperproliferative disorder; acute glomerulonephritis; tonsillitis;
KW respiratory disorder; rhinitis; sinusitis; neurological disease;
KW endocrine disorder; Addison's disease; reproductive system disorder;
KW endometriosis; vasotropic; vulnery; cytostatic; nootropic; cardiant;
XX anti-HIV; tranquilliser; gout; antiparasitic.
OS Homo sapiens.
XX
XX Key Location/Qualifiers
FH Peptide 1..22 /label= Signal_peptide
FT Protein 23..298
FT Misc-difference 42 /label= Unknown /note= "Human mature secreted protein"
FT Misc-difference 58 /label= Unknown /note= "Encoded by GWG"
FT Misc-difference 58 /label= Unknown /note= "Encoded by TSC"
XX
XX US2002077287-A1.
XX 20-JUN-2002.
XX 11-MAY-2001; 2001US-0852659.
XX 11-SEP-1998; 98US-0152060.
XX (RUBE/) RUBEN S M.
XX (ROSE/) ROSEN C A.
XX (LIYY/) LI Y.
XX (ZENG/) ZENG Z.
XX (FYAW/) KYAW H.
XX (FISC/) FISCHER C L.
XX (LIHH/) LI H.
XX (SOPP/) SOPPET D R.
XX (GENT/) GENTZ R L.
XX (WEIY/) WEI Y.
XX Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
XX Soppet DR, Gentz RL, Wei Y, Moore PA, Young PB, Greene JM;
XX Ferrie AM;
XX WPI; 2002-598780/64.
XX N-PSDB; AAD44660.
XX Novel human secreted polypeptides and polynucleotides for diagnosing,
XX preventing, treating immune, hyperproliferative, cardiovascular,
XX neurological, reproductive disorders and identifying modulators of
XX therapeutic use
XX
XX Claim 11; Page 186; 209pp; English.
XX
XX AAD44636-AAD44676 represent cDNAs corresponding to 28 human secreted
XX protein genes, and AAE26959-AAE26999 represent the proteins they encode.
XX AAE27000-AAE27025 represent human secreted protein fragments or their
XX variants. The secreted proteins and genes are useful for preventing,
XX treating or ameliorating medical conditions, e.g., by protein or gene
XX therapy. Specific uses are described for each of the 28 genes, based
XX on the tissues in which they are most highly expressed and include
XX developing products for the diagnosis or treatment of immunodeficiencies,
XX e.g., X-linked agammaglobulinaemia, B cell immunodeficiencies, severe
XX combined immunodeficiencies, autoimmune disorders e.g., systemic lupus
XX erythematosus, rheumatoid arthritis, multiple sclerosis, autoimmune
XX thyroiditis, autoimmune haemolytic anaemia, Goodpasture's syndrome,
XX Grave's disease, diabetes mellitus, dermatitis, inflammatory conditions

CC including septic shock, sepsis, reperfusion injury, inflammatory bowel
CC disease, Crohn's disease, haematopoietic disorders, respiratory
CC disorders e.g., asthma and allergy, gastrointestinal disorders e.g.,
CC inflammatory bowel disease), cancers e.g., gastric, ovarian, lung,
CC liver, bladder and breast), central nervous system (CNS) disorders e.g.,
CC ischemic brain injury and/or stroke, neurodegenerative disorders e.g.,
CC Parkinson's disease and Alzheimer's disease, AIDS-related dementia and
CC prion disease, cardiovascular disorders e.g., myocarditis, arrhythmias,
CC atherosclerosis, inflammatory disorders e.g., hepatitis, gout, trauma,
CC pancreatitis, sarcoidosis and allogeneic transplant rejection, blood-
CC related disorder (thrombosis, arterial thrombosis, atherosclerosis),
CC hyperproliferative disorders, respiratory disorders e.g. rhinitis,
CC sinusitis, tonsillitis, lung cancer, allergic disorders, pneumonitis,
CC renal disorders. e.g. acute glomerulonephritis, neurological diseases,
CC liver disorders, endocrine disorders e.g., hyperthyroidism, Addison's
CC disease, hyperpituitarism, infectious diseases and reproductive system
CC disorders e.g., endometriosis. The present sequence represents a human
CC secreted protein of the invention.

XX
SQ Sequence 298 AA;

Query Match 99.3%; Score 274; DB 23; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.2e-260;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YHKAYGFSAPKQQQVVTAVXQBAIILACKTPKKTVXSRLEWKKLGRSVFVYQQTLOGD 60
Db 23 YHKAYGFSAPKQQQVVTAVXQBAIILACKTPKKTVXSRLEWKKLGRSVFVYQQTLOGD 82

QY 61 FKNRAEMIDFNIRIKNVTSDAGKYCEVSAPEQQONLEEDVTLEVLVAPVPSCEVP 120
Db 83 FKNRAEMIDFNIRIKNVTSDAGKYCEVSAPEQQONLEEDVTLEVLVAPVPSCEVP 142

QY 121 SSALSGTVVELRCQDEKGNPAPYTWFKGIRLLENPRLGQSTNSYTNMTKTGLQFN 180
Db 143 SSALSGTVVELRCQDEKGNPAPYTWFKGIRLLENPRLGQSTNSYTNMTKTGLQFN 202

QY 181 TVSKLDTGYSCEARNVGYRRCPGKRMQVDDLNISGIIIAVVVALVSVGLGVCYQAQ 240
Db 203 TVSKLDTGYSCEARNVGYRRCPGKRMQVDDLNISGIIIAVVVALVSVGLGVCYQAQ 262

QY 241 RKGYSFKETSFQKSNSSKATTMSNDPKTKSFII 276
Db 263 RKGYSFKETSFQKSNSSKATTMSNDPKTKSFII 298

RESULT 3
ID AAE27121
AC AAE27121
XX AAE27121
XX AAE27121
DT 13-DEC-2002 (first entry)
XX Human gene 25 encoded secreted protein HTEEB42, SEQ ID NO:76.
DE Human; secreted protein; autoimmune disease; hyperproliferative disorder;
KW rheumatoid arthritis; neoplasm; cerebrovascular disorder; angiogenesis;
KW cerebral ischaemia; cardiovascular disorder; nervous system disorder;
KW cardiac arrest; Alzheimer's disease; ocular disorder; wound healing;
KW infection; corneal infection; skin aging; food additive; preservative;
KW tissue regeneration; immunosuppressive; antiproliferative; cytostatic;
KW caridiatic; vasotropic; cerebroprotective; neurotropic; neuroprotective;
KW antibacterial; virucide; fungicide; ophthalmological; gene therapy;
KW vulneryary.

OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Peptide 1..22
FT FT /label= Signal_peptide
FT Protein 23..298
FT /note= "Mature human secreted protein"

FT Misc-difference 42 /label= Unknown
FT /note= "Encoded by GWG"
FT Misc-difference 58 /label= Unknown
FT /note= "Encoded by TSC"
XX US2002076756-A1.
XX 20-JUN-2002.
XX 11-MAY-2001; 2001US-0853161.
XX 02-FEB-2001; 2001US-265583P.
XX (RUBE/) RUBEN S M.
XX (ROSE/) ROSEN C A.
XX (LIYY/) LI Y.
XX (ZENG/) ZENG Z.
XX (KYAW/) KYAW H.
XX (FISC/) FISCHER C L.
XX (LIHH/) LI H.
XX (SOPP/) SOPPET D R.
XX (GENT/) GENTZ R L.
XX (WEIY/) WEI Y.
XX (MOOR/) MOORE P A.
XX (YOUN/) YOUNG P E.
XX (GREE/) GREENE J M.
XX (FERR/) FERRIE A M.
XX Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
PI Soppet DR, Gentz RL, Wei Y, Moore PA, Young PE, Greene JM;
PI Ferrie AM;
XX WPI; 2002-574454/61.
DR N-PSDB; AAD44878.
XX
PT New nucleic acid molecules encoding 28 human secreted proteins, useful
PT for diagnosing, preventing, treating or ameliorating medical conditions
PT and as food additives or preservatives
XX
PS Claim 11; Page 186-187; 209pp; English.
XX
CC AAD44854-AAD44984 represent cDNAs corresponding to 28 human secreted
CC protein genes, and AAE27097-AAE27137 represent the proteins they encode.
CC AAE27138-AAE27164 represent human secreted protein fragments. The genes
CC and their corresponding secreted proteins are useful for preventing,
CC treating or ameliorating medical conditions, e.g., by protein or gene
CC therapy. Secreted protein sequences of the invention are useful for the
CC diagnosis or treatment of disorders such as autoimmune diseases (e.g.,
CC rheumatoid arthritis), hyperproliferative disorders (e.g. neoplasms of
CC the breast or liver), cerebrovascular disorders (e.g. cerebral ischaemia,
CC angiogenesis), cardiovascular disorders (e.g. cardiac arrest), nervous
CC system disorders (e.g. Alzheimer's disease), infections caused by fungi,
CC bacteria and viruses and ocular disorders (e.g. corneal infection). The
CC polypeptides can also be used to aid wound healing and epithelial cell
CC proliferation, to prevent skin aging due to sunburn, to maintain organs
CC before transplantation, for supporting cell culture of primary tissues,
CC to regenerate tissues and in chemotaxis. They can also be used as food
CC additives or preservative to increase or decrease storage capabilities,
CC fat content, lipid, protein, carbohydrate, vitamins, minerals, cofactors
CC and other nutritional components. The present sequence represents a human
CC secreted protein of the invention.
XX
SQ Sequence 298 AA;

Query Match 99.3%; Score 274; DB 23; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.2e-260;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YHKAYGFSAPKQQQVVTAVXQBAIILACKTPKKTVXSRLEWKKLGRSVFVYQQTLOGD 60
Db 23 YHKAYGFSAPKQQQVVTAVXQBAIILACKTPKKTVXSRLEWKKLGRSVFVYQQTLOGD 82

Qy 61 FKRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSQGNLEEDTTLVLELVAPVPSCEVP 120
Db 83 FKRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSQGNLEEDTTLVLELVAPVPSCEVP 142
Qy 121 SSALSGTIVVELRCQDKEGPAPEYTFWKDGIRLLENPRLSQSTNSSTYTNKTGTTLQFN 180
Db 143 SSALSGTIVVELRCQDKEGPAPEYTFWKDGIRLLENPRLSQSTNSSTYTNKTGTTLQFN 202
Qy 181 TVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDLNISGIIAAVVVALVISVCGLGVCYQAQ 240
Db 203 TVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDLNISGIIAAVVVALVISVCGLGVCYQAQ 262
Qy 241 RKGYSKETSFOKSNSSSKATTMSNDPKHTKSFI 276
Db 263 RKGYSKETSFOKSNSSSKATTMSNDPKHTKSFI 298

RESULT 4

ABR47926

ID ABR47926 standard; Protein; 298 AA.

XX

AC ABR47926;

DT 12-JUN-2003 (first entry)

XX

DE Human secreted protein, SEQ ID 817.

XX

KW Cardiant; antiarrhythmic; antiarteriosclerotic; vasotropic; cytostatic;
KW vulnary; antiinflammatory; nootropic; neuroprotective;
KW antiparkinsonian; gene therapy; human; cardiovascular disorder.

XX

OS Homo sapiens.

XX

PN WO200295010-A2.

XX

PD 28-NOV-2002.

XX

XX 19-MAR-2002; 2002WO-US09785.

XX

PR 21-MAR-2001; 2001US-277340P.

PR

PR 19-JUL-2001; 2001US-306171P.

PR

PR 13-NOV-2001; 2001US-331287P.

XX

XX (HUMA-) HUMAN GENOME SCI INC.

XX

XX Rosen CA, Ruben SM;

XX

XX WPI; 2003-129429/12.

XX

XX Novel human secreted proteins, useful for detecting, preventing,

PT diagnosing, prognosticating, treating and/or ameliorating

PT cardiovascular disorders such as arrhythmia -

XX

XX Claim 13; SEQ ID 817; 1881pp; English.

XX

XX The present invention relates to novel human secreted proteins
CC (ABR47633-ABR48145) and their coding sequences (ACC50344-ACC50856). The
CC proteins and their coding sequences are useful for the preparation of a
CC diagnostic or pharmaceutical composition for diagnosing or treating a
CC cardiovascular disorder (e.g., arrhythmia, tachycardia, cardiac arrest,
CC coronary arteriosclerosis and myocardial ischaemia), neural disorders,
CC immune system disorders, muscular disorders, reproductive disorders,
CC gastrointestinal disorders, pulmonary disorders, renal disorders,
CC proliferative disorders and/or cancerous diseases and conditions, for
CC wound healing and epithelial cell proliferation, to treat inflammation or
CC infection, for treating thrombosis and arteriosclerosis, for treating or
CC preventing neural damage which occurs in neuronal disorders or
CC neurodegenerative conditions such as Alzheimer's disease and Parkinson's
CC disease, to enhance bone and periodontal regeneration and aid in tissue
CC transplants or bone grafts, to prevent skin aging or hair loss, to
CC stimulate growth and differentiation of haematopoietic cells and bone
CC marrow cells when used in combination with other cytokines, to maintain

PR 30-MAY-1997; 97US-050934P.
 PR 06-JUN-1997; 97US-048970P.
 PR 05-SEP-1997; 97US-057765P.
 PR 19-DEC-1997; 97US-068368P.
 PR 02-FEB-2001; 2001US-265583P.
 PR 12-MAR-1998; 98WO-US048583P.
 PR 11-SEP-1998; 98US-0152060.
 XX (RUBE/) RUBEN S M.
 PA (ROSE/) ROSEN C A.
 PA (LIYY/) LI Y.
 PA (ZENG/) ZENG Z.
 PA (KYAW/) KYAW H.
 PA (FISCH) FISCHER C L.
 PA (LIHH/) LI H.
 PA (SOPP/) SOPPET D R.
 PA (GENT/) GENTZ R L.
 PA (WEIY/) WEI Y.
 PA (MOOR/) MOORE P A.
 PA (YOUN/) YOUNG P E.
 PA (GREE/) GREENE J M.
 PA (FERR/) FERRIE A M.
 XX Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
 PI Soppet DR, Gentz RL, Wei Y, Moore PA, Young PE, Greene JM;
 PI Ferrie AM;
 XX WPI; 2003-310989/30.
 DR N-PSDB; ABX96990.
 XX
 XX New human secreted polypeptides and polynucleotides for diagnosing,
 PT prognosing, preventing and treating immune, hyperproliferative, liver,
 PT kidney, reproductive disorders and for identifying modulators of
 PT therapeutic use -
 PT
 XX Claim 11; Page 186; 209pp; English.
 XX
 CC The invention relates to an isolated polypeptide comprising an amino acid
 CC sequence at least 95% identical to sequence of 28 human secreted
 CC proteins, their fragment, polypeptide domain, epitope, secreted form,
 CC variant, allelic variant, or species homologue, or the encoded sequence
 CC included in ATCC 97921 and 97922. Also included are the encoding
 CC nucleic acids, recombinant vectors, host cells, antibodies, and genes.
 CC The proteins and nucleic acids are useful for diagnosing, preventing,
 CC treating, prognosing or ameliorating a medical condition e.g.
 CC immunodeficiencies (e.g. X-linked agammaglobulinemia, B cell
 CC immunodeficiencies, severe combined immunodeficiencies), autoimmune
 CC disorders (e.g. systemic erythematous, rheumatoid arthritis, multiple
 CC sclerosis, autoimmune thyroiditis, autoimmune haemolytic anaemia,
 CC Goodpasture's syndrome, Grave's disease, diabetes mellitus, dermatitis),
 CC hematopoietic disorders, inflammatory conditions (e.g. septic shock,
 CC sepsis, reperfusion injury, inflammatory bowel disease, Crohn's disease),
 CC respiratory disorders (e.g. asthma and allergy), gastrointestinal
 CC disorders, cancers (e.g. gastric, ovarian, lung, bladder, liver and
 CC breast), central nervous system (CNS) disorders (e.g. ischaemic brain
 CC injury and/or stroke, traumatic brain injury), neurodegenerative
 CC disorders (e.g. Parkinson's disease and Alzheimer's disease, AIDS-related
 CC demetia, and prion disease), cardiovascular disorders (e.g.
 CC atherosclerosis, myocarditis, cardiovascular disease, and cardiopulmonary
 CC bypass complications), inflammation (e.g. hepatitis, gout, trauma,
 CC pancreatitis, sarcoidosis, dermatitis, allogeneic transplant rejection),
 CC blood-related disorders (thrombosis, arterial thrombosis),
 CC hyperproliferative disorders, renal disorders (e.g. acute
 CC glomerulonephritis), endocrine disorders (e.g. Addison's disease,
 CC hyperthyroidism, hyperpituitarism), liver diseases and disorders,
 CC reproductive system disorders (e.g. endometriosis), infectious diseases,
 CC and pancreatic disorders. Many other diseases and disorders are listed in
 CC the specification. They also useful as a vaccine adjuvant. Further they
 CC are useful to enhance or inhibit complement mediated cell lysis, for
 CC stimulating wound and tissue repair, angiogenesis, and the repair of
 CC vascular or lymphatic diseases or disorders. They are also useful
 CC to prevent hair loss, to modulate mammalian characteristics such as body
 CC height, weight, hair colour, and to increase or decrease storage

CC capabilities, fat content, lipid, protein, carbohydrate, vitamins,
 CC minerals, cofactors or other nutritional components. The proteins are
 CC also useful for identifying binding partners. The present sequence
 CC represents a secreted protein of the invention.
 XX
 SQ Sequence 298 AA;
 Query Match 99.3%; Score 274; DB 24; Length 298;
 Best Local Similarity 100.0%; Pred. No. 1.2e-260; Indels 0; Gaps 0;
 Matches 276; Conservative 0; Mismatches 0;
 QY 1 YHKAYGFSAPKQQQVVTAVXYOEAILACKTPKTKVXSRLEWKKLGRSVSFVYYQQTLOGD 60
 DB 23 YHKAYGFSAPKQQQVVTAVXYOEAILACKTPKTKVXSRLEWKKLGRSVSFVYYQQTLOGD 82
 QY 61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSGQGNLEEDTTLVFLVAPVPSCEVP 120
 DB 83 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSGQGNLEEDTTLVFLVAPVPSCEVP 142
 QY 121 SSALSGTIVELRCQDKEGNPAEYTWFKDGRIRLLENPRLGSGQSNSSVTMTKTGTLOFN 180
 DB 143 SSALSGTIVELRCQDKEGNPAEYTWFKDGRIRLLENPRLGSGQSNSSVTMTKTGTLOFN 202
 QY 181 TVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNISGIIAAVVVVVALVISVCGLGVCYQAQ 240
 DB 203 TVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNISGIIAAVVVVVALVISVCGLGVCYQAQ 262
 QY 241 RKGYSKTSFQKSNSSSKATTMTSENDFKTKSPFI 276
 DB 263 RKGYSKTSFQKSNSSSKATTMTSENDFKTKSPFI 298
 RESULT 6
 ID ABR00172 standard; Protein; 298 AA.
 XX
 AC ABR00172;
 DT 03-APR-2003 (first entry)
 XX
 DE Human gene 162 encoded secreted protein HTEEB42, SEQ ID NO:461.
 XX
 KW Human; secreted protein; digestive disorder; gastrointestinal disorder;
 KW mouth; oesophagus; stomach; small intestine; large intestine; liver;
 KW biliary tract; pancreas; cancer; tumour; hyperproliferative disorder;
 KW immune disorder; inflammation; infection; wound healing; drug screening;
 KW chromosome identification; chromosome mapping; cytostatic; gene therapy;
 KW antiinflammatory; immunosuppressive; vulnery; chromosome 21q21.2.
 XX
 OS Homo sapiens.
 XX
 PN W0200276488-A1.
 XX
 PD 03-OCT-2002.
 XX
 PF 19-MAR-2002; 2002WO-US08276.
 XX
 PR 21-MAR-2001; 2001US-277340P.
 PR 19-JUL-2001; 2001US-306171P.
 PR 13-NOV-2001; 2001US-331287P.
 XX
 PA (HUMA-) HUMAN GENOME SCI INC.
 XX
 PI Rosen CA, Ruben SM;
 XX WPI; 2003-029900/02.
 DR N-PSDB; AB271351.
 XX
 PT New human secreted proteins and nucleic acids, useful for detecting,
 PT preventing, diagnosing, prognosticating, treating and/or ameliorating
 PT e.g. gastrointestinal diseases and disorders, or cancers -
 XX
 PS Claim 13; Page 1046-1047; 1216pp; English.

XX AB271190-AB271478 represent cDNAs corresponding to 178 human secreted
 CC protein genes, and ABP00011-ABP00299 represent the proteins they encode.
 CC AB271479-AB271540 represent human secreted protein genomic fragments. The
 CC invention also encompasses antibodies specific for the secreted proteins,
 CC the use of the secreted proteins in drug screening, and recombinant
 CC vectors and host cells comprising a nucleic acid of the invention. The
 CC secreted proteins, nucleic acids encoding them, antibodies or antibody
 CC fragments specific for the secreted proteins, and modulators of protein
 CC activity are useful for diagnosing, treating, ameliorating or preventing
 CC digestive disorders. Such conditions include disorders of the mouth,
 CC oesophagus, stomach, small intestine, large intestine, liver, biliary
 CC tract and pancreas, and include cancers of these organs and tissues. The
 CC secreted proteins and their nucleic acids may also be used in the
 CC treatment of immune disorders, inflammation, infection,
 CC hyperproliferative disorders, and to promote wound healing. Nucleic acids
 CC of the invention may be used for chromosome identification, from minute
 CC mapping, in gene therapy, for identifying individuals from minute
 CC biological samples, as hybridisation probes, and as molecular weight
 CC markers. The present sequence represents a human secreted protein of the
 CC invention.

XX SQ Sequence 298 AA;

Query Match 99.3%; Score 274; DB 24; Length 298;
 Best Local Similarity 100.0%; Pred. No. 1.2e-260;
 Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 YHKA YGFSAPKQQVAVXYQAEILACKTPKTVXSRLEWKLGSRVSFVYQQTQQD 60
 DB 23 YHKA YGFSAPKQQVAVXYQAEILACKTPKTVXSRLEWKLGSRVSFVYQQTQQD 82
 QY 61 FKRAEMIDFNIRIKNTRSDAGKYRCEVSPSQGNLEEDTTLVLA VAPVSCVVP 120
 DB 83 FKRAEMIDFNIRIKNTRSDAGKYRCEVSPSQGNLEEDTTLVLA VAPVSCVVP 142
 QY 121 SSALSGTVVELRCQDKEGNPAPEYTFWFKDGRILENPRLGQSTNSSTYTNKTKTGLQFN 180
 DB 143 SSALSGTVVELRCQDKEGNPAPEYTFWFKDGRILENPRLGQSTNSSTYTNKTKTGLQFN 202
 QY 181 TVSKLDTGEYSCEARNVGYRRCRGMQVDDLNISGIIAAVVA VLVISVCGLGVCYQAQ 240
 DB 203 TVSKLDTGEYSCEARNVGYRRCRGMQVDDLNISGIIAAVVA VLVISVCGLGVCYQAQ 262
 QY 241 RKGYSFKTSFQKSNSSSKATTMSENDFKHTKSFII 276
 DB 263 RKGYSFKTSFQKSNSSSKATTMSENDFKHTKSFII 298

RESULT 7

AAW85457
 ID AAW85457 standard; Protein; 298 AA.

XX AC AAW85457;

XX DT 25-FEB-1999 (first entry)

XX DE Secreted protein encoded by clone ct864_4.

XX KW Secreted protein; nutritional activity; immune stimulating; vaccine;
 KW suppressing activity; haematopoiesis regulating activity;
 KW tissue growth activity; activin; inhibin activity; chemotaxis;
 KW chemokine activity; haemostasis; thrombolytic activity; receptor;
 KW ligand; anti-inflammatory; cadherin; tumour invasion suppressor;
 KW tumour inhibition; gene therapy.

OS Homo sapiens.

XX WO9842739-A2.

XX PD 01-OCT-1998.

XX PF 20-MAR-1998; 98WO-US05653.

XX 19-MAR-1998; 98US-0044466.
 PR 21-MAR-1997; 97US-0822167.
 XX (GEMV) GENETICS INST INC.
 XX Agostino MJ, Jacobs K, Lavallie ER, McCoy JM, Merberg D;
 PI Racie LA, Spaulding V, Treacy M;
 XX WPI; 1998-609890/51.
 DR N-PSDB; AAV82780.
 XX New polynucleotides encoding secreted human proteins - derived from
 PT human foetal brain, adult brain, foetal kidney, placenta or adult
 PT pineal gland cDNA libraries.
 PS Claim 17; Page 73-74; 113pp; English.
 XX The present sequence represents a secreted protein. The polynucleotide
 CC and secreted protein are predicted to have biological activities which
 CC would make them suitable for treating, preventing or ameliorating medical
 CC conditions in humans and animals, although no supporting data is given.
 CC Suggested activities include nutritional activity, immune stimulating
 CC (e.g. as vaccines) or suppressing activity, haematopoiesis regulating
 CC activity, tissue growth activity, activin/inhibin activity,
 CC chemotactic/chemokinetic activity, haemostatic and thrombolytic activity,
 CC receptor/ligand activity, anti-inflammatory activity, cadherin/tumour
 CC invasion suppressor activity, and tumour inhibition activity (no data is
 CC given in the specification to support these activities). The
 CC polynucleotide is also stated to be useful for gene therapy.

XX SQ Sequence 298 AA;

Query Match 87.0%; Score 240; DB 19; Length 298;
 Best Local Similarity 100.0%; Pred. No. 3e-227;
 Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 37 SRLEWKLGSRVSFVYQQTQQDKEGNPAPEYTFWFKDGRILENPRLGQSTNSSTYTNKTKTGLQFN 96
 DB 59 SRLEWKLGSRVSFVYQQTQQDKEGNPAPEYTFWFKDGRILENPRLGQSTNSSTYTNKTKTGLQFN 118
 QY 97 QNLEEDTTLVLA VAPVSCVVPSSALSGTVVELRCQDKEGNPAPEYTFWFKDGRILEN 156
 DB 119 QNLEEDTTLVLA VAPVSCVVPSSALSGTVVELRCQDKEGNPAPEYTFWFKDGRILEN 178
 QY 157 PRLGQSTNSSTYTNKTKTGLQFNVTGKLTGEYSCEARNVGYRRCRGMQVDDLNIS 216
 DB 179 PRLGQSTNSSTYTNKTKTGLQFNVTGKLTGEYSCEARNVGYRRCRGMQVDDLNIS 238
 QY 217 GIIAAVVA VLVISVCGLGVCYQAQRKGYSFKTSFQKSNSSSKATTMSENDFKHTKSFII 276
 DB 239 GIIAAVVA VLVISVCGLGVCYQAQRKGYSFKTSFQKSNSSSKATTMSENDFKHTKSFII 298

RESULT 8

AAU00512
 ID AAU00512 standard; Protein; 298 AA.

XX AC AAU00512;

XX DT 09-MAY-2001 (first entry)

XX DE Human junctional adhesion protein (JAM2).

XX KW Junctional adhesion protein; JAM2; cellular localisation;
 KW cellular expression; immunoprecipitation; stroke; phosphorylation;
 KW glycosylation; paracellular migration; inflammatory disease;
 KW arthritis; asthma; rheumatoid arthritis; inflammatory bowel disease;
 KW Crohn's disease.

OS Homo sapiens.

XX Key

Location/Qualifiers

FT Peptide 1..20 /note= "Possible signal peptide #1"
 FT Peptide 1..28 /note= "Possible signal peptide #2"
 FT Protein 21..298 /note= "Possible mature JAM2 #1"
 FT Protein 29..298 /note= "Possible mature JAM2 #2"
 FT Domain 237..254 /note= "Transmembrane domain"
 XX WO200114404-A1.
 PN 01-MAR-2001.
 XX 23-AUG-2000; 2000MO-US231158.
 XX 24-AUG-1999; 99US-0150459.
 XX (TEXA-) TEXAS BIOTECHNOLOGY CORP.
 XX Cunningham S, Trindad Arrate Barros M;
 PI WPI; 2001-218425/22.
 DR N-PSDB; AAS00512.
 XX Novel nucleic acids encoding human junctional adhesion protein useful
 PT for producing antibodies that are suitable for therapeutic purposes -
 PS Claim 4; Page 46-47; 51pp; English.
 XX The sequence represents a human junctional adhesion molecule 2 (JAM2).
 CC The polynucleotide encoding the polypeptide is useful for recombinant
 CC production of JAM-2 protein, which in turn is useful for the production
 CC of antibodies. The antibodies may be used for probing cellular
 CC localisation and/or expression of JAM2 in tissues under normal and
 CC disease states, for immunoprecipitating JAM2 protein from cells and/or
 CC stroke tissues to determine whether it is modified by glycosylation and
 CC phosphorylation, and for determining JAM2 function. The antibodies
 CC inhibit interaction of JAM2 with inflammatory cells or influences their
 CC paracellular migration, and is therefore useful for alleviating
 CC inflammatory diseases such as arthritis, asthma, rheumatoid arthritis,
 CC inflammatory bowel disease and Crohn's disease.
 XX SQ Sequence 298 AA;

Query Match 87.0%; Score 240; DB 22; Length 298;
 Best Local Similarity 100.0%; Pred. No. 3e-227;
 Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 37 SRLEWKKLGRSVSVFYVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
 DB 59 SRLEWKKLGRSVSVFYVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
 QY 97 QNLEEDTVTLVLVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTWFKDGIIRLLEN 156
 DB 119 QNLEEDTVTLVLVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTWFKDGIIRLLEN 178
 QY 157 PRLGQSQTNSSTYMTNKTGTQNTVSKLDTGEYSCEARNVGYRRCPCRMQVDDNLIS 216
 DB 179 PRLGQSQTNSSTYMTNKTGTQNTVSKLDTGEYSCEARNVGYRRCPCRMQVDDNLIS 238
 QY 217 GIIAVWVVALVISVCGLGVCVQAQRGYPSKETSFKNSNSSKATMTSENDFKHTKSFII 276
 DB 239 GIIAVWVVALVISVCGLGVCVQAQRGYPSKETSFKNSNSSKATMTSENDFKHTKSFII 298

RESULT 9
 ABP61801
 ID ABP61801 standard; Protein; 298 AA.
 AC ABP61801;
 XX

DT 04-OCT-2002 (first entry)
 XX Human polypeptide SEQ ID NO 155.
 DE
 XX Human; cytostatic; antirheumatic; antiarthritic; vulnery; analgesic;
 KW antiinflammatory; antibacterial; immunosuppressive; antiparkinsonian;
 KW neuroprotective; nootropic; osteopathic; haemostatic; vasotropic;
 KW antiulcer; fungicide; antidiabetic; antiasthmatic; antiallergic;
 KW immunostimulant; antiparasitic; secreted protein; transmembrane protein;
 KW cytokine; cell proliferation; cell differentiation; autoimmune disease;
 KW stem cell; growth factor; nervous system disease; neuropathy;
 KW Alzheimer's disease; Parkinson's disease; Huntington's disease;
 KW osteoporosis; severe combined immunodeficiency; SCID; infection;
 KW multiple sclerosis; rheumatoid arthritis; gene therapy.
 XX Homo sapiens.
 XX US2002065394-A1.
 PN 30-MAY-2002.
 XX 22-DEC-2000; 2000US-0745763.
 XX 18-MAR-1998; 98US-0040963.
 XX (JACO/) JACOBS K.
 PA (MCCO/) MCCOY J M.
 PA (LAVA/) LAVALLIE E R.
 PA (COLL/) COLLINS-RACIE L A.
 PA (EVAN/) EVANS C.
 PA (MERB/) MERBERG D.
 PA (TREA/) TREACY M.
 PA (SPAU/) SPAULDING V.
 XX Jacobs K, McCoy JM, LaVallie ER, Collins-Racie LA, Evans C;
 PI Merberg D, Treacy M, Spaulding V;
 XX WPI; 2002-582343/62.
 DR N-PSDB; ABQ92017.
 XX Novel secreted or transmembrane protein and polynucleotide encoding the
 PT protein, useful for diagnosis and treatment of neurological disorders,
 PT cancer, autoimmune diseases, bone disorders and lung or liver fibrosis
 PT -
 XX Claim 54; Page 116-117; 284pp; English.
 PS The invention relates to human secreted or transmembrane protein (I),
 CC their fragments and is encoded by specific complementary deoxyribonucleic
 CC acid (cDNA) inserts (II), where the protein is substantially free from
 CC other mammalian proteins. (I) are useful for preventing, treating or
 CC ameliorating a medical condition, especially immunological treatment or
 CC prevention of tumours. (I) exhibits activity relating to angiogenesis,
 CC cytokine, cell proliferation, cell differentiation, antiinflammatory,
 CC stem cell growth factor activity and activin or inhibin-related
 CC activities. (I) can be used to manipulate stem cells in culture to give
 CC rise to neuroepithelial cells that can be used to augment or replace
 CC cells damaged by illness, autoimmune disease, accidental damage or
 CC genetic disorders. (I) induces the proliferation of neural cells and
 CC regeneration of nerve and brain tissue and is useful for the treatment of
 CC central and peripheral nervous system diseases and neuropathies, such as
 CC Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic
 CC lateral sclerosis. (I) is involved in chemotactic or chemokinetic
 CC or lymphoid cell disorders, platelet disorders such as thrombocytopaenia
 CC and for regeneration of bone, cartilage, tendon, ligament and/or nerve
 CC tissue growth and in tissue repair, healing of burns, incisions, ulcers,
 CC for treating osteoporosis, osteoarthritis, bone degenerative disorders or
 CC periodontal disease. (I) is also useful for gut protection or
 CC regeneration and treatment of lung or liver fibrosis, reperfusion injury
 CC in various tissues, various immune deficiencies and disorders including
 CC severe combined immunodeficiency (SCID), bacterial or fungal infections,
 CC autoimmune disorders e.g. multiple sclerosis, rheumatoid arthritis,

CC diabetes mellitus, myasthenia gravis, allergic reactions and conditions,
 CC such as asthma or other respiratory problems. (II) is useful to express
 CC recombinant protein, as markers for tissues in which the corresponding
 CC protein is preferentially expressed and in gene therapy. The present
 CC sequence is that of a polypeptide of the invention.

XX
 XX
 SQ Sequence 298 AA;

Query Match 87.0%; Score 240; DB 23; Length 298;
 Best Local Similarity 100.0%; Pred. No. 3e-227;
 Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 37 SRLEWKILGRSVSFVYQQTLOGDFKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 96
 DB 59 SRLEWKILGRSVSFVYQQTLOGDFKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118

QY 97 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDEGNPAPEYTFWFGDGLRLLEN 156
 DB 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDEGNPAPEYTFWFGDGLRLLEN 178

QY 157 PRLGSTNSSTNTMTKTGTLOFNTVSKLDTGEYSCARNVGVYRRCPCGKMQVDDNLIS 216
 DB 179 PRLGSTNSSTNTMTKTGTLOFNTVSKLDTGEYSCARNVGVYRRCPCGKMQVDDNLIS 238

QY 217 GIIAAVVVVALVISVCGLGVCYAKRGYFSKETSFOKSNSSSKATTMSSEDFKHTKSFII 276
 DB 239 GIIAAVVVVALVISVCGLGVCYAKRGYFSKETSFOKSNSSSKATTMSSEDFKHTKSFII 298

RESULT 10
 AA016452
 ID AA016452 standard; protein; 298 AA.
 AC AA016452;
 XX
 XX 17-APR-2003 (first entry)
 XX Human junctional adhesion molecule 2 (huJAM2).

Human; gene therapy; extracellular region; junctional adhesion molecules;
 huJAM; immune system disorder; immune deficiency; autoimmune disorder;
 inflammatory disorder; cancer; wound healing; cardiovascular disease;
 full-length membrane-bound huJAM protein.

OS Homo sapiens.

PH Key Location/Qualifiers
 FT Peptide 1..28
 FT Domain /label= Signal_peptide
 29..236
 FT /note= "Extracellular domain; Specifically claimed
 region"
 FT Protein 29..298
 FT /note= "Mature huJAM2"

XX WO2003008541-A2.
 PN 30-JAN-2003.
 XX
 XX 05-JUL-2002; 2002WO-US19800.
 XX
 XX 16-JUL-2001; 2001US-305752P.
 PR 05-FEB-2002; 2002US-354345P.
 XX
 XX (ELIL) LILLY & CO ELI.
 PA
 XX Heuer JG, Smith RC, Su EW;
 PI WPI; 2003-221848/21.
 XX DR N-PSDB; AAL51599.
 DR
 XX New extracellular human junctional adhesion molecule (huJAM)
 PT polypeptide, useful for treating an immune system disorder such as an

PT immune deficiency or an inflammatory disorder, cancer, wound healing,
 PT or a cardiovascular disease -
 XX
 XX Disclosure; Fig 1; 131pp; English.

XX The invention comprises the DNA and protein sequences of the
 CC extracellular region of human junctional adhesion molecules (huJAM). The
 CC extracellular huJAM DNA and protein sequences are useful in the treatment
 CC of: immune system disorders (e.g. immune deficiency); autoimmune
 CC disorders; inflammatory disorders; cancer; wound healing; or a
 CC cardiovascular disease. The present amino acid sequence represents the
 CC full-length membrane-bound huJAM2 protein.

SQ Sequence 298 AA;

Query Match 87.0%; Score 240; DB 24; Length 298;
 Best Local Similarity 100.0%; Pred. No. 3e-227;
 Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 37 SRLEWKILGRSVSFVYQQTLOGDFKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 96
 DB 59 SRLEWKILGRSVSFVYQQTLOGDFKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118

QY 97 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDEGNPAPEYTFWFGDGLRLLEN 156
 DB 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDEGNPAPEYTFWFGDGLRLLEN 178

QY 157 PRLGSTNSSTNTMTKTGTLOFNTVSKLDTGEYSCARNVGVYRRCPCGKMQVDDNLIS 216
 DB 179 PRLGSTNSSTNTMTKTGTLOFNTVSKLDTGEYSCARNVGVYRRCPCGKMQVDDNLIS 238

QY 217 GIIAAVVVVALVISVCGLGVCYAKRGYFSKETSFOKSNSSSKATTMSSEDFKHTKSFII 276
 DB 239 GIIAAVVVVALVISVCGLGVCYAKRGYFSKETSFOKSNSSSKATTMSSEDFKHTKSFII 298

RESULT 11

AA08060
 ID AA08060 standard; Protein; 312 AA.

XX AA08060;
 XX
 XX 11-SEP-2000 (first entry)
 XX Human PRO245 protein.

XX Inflammatory cell infiltration; immune response; T cell proliferation;
 anti-inflammatory; anti-autoimmune; anti-diabetic; spondyloarthritis;
 T cell-mediated disease; spondyloarthritis; sclerosis; renal disease;
 inflammatory myopathy; hemolytic anemia; thrombocytopenia; thyroiditis;
 diabetes mellitus; demyelinating polyneuropathy; Guillain-Barre syndrome;
 multiple sclerosis; polynuropathy; hepatitis; cirrhosis; enteropathy;
 sclerosing cholangitis; inflammatory bowel disease; enteropathy;
 skin disease; dermatitis; psoriasis; asthma; allergic rhinitis; tumor;
 food hypersensitivity; urticaria; eosinophilic pneumonia; transplant;
 idiopathic pulmonary fibrosis; graft rejection; PRO245; human.

XX Homo sapiens.

XX WO9914241-A2.

XX 25-MAR-1999.

XX 17-SEP-1998; 98WO-US19437.

XX 17-SEP-1997; 97US-0059119.

XX 18-SEP-1997; 97US-0059263.

XX 28-OCT-1997; 97US-0063550.

XX 12-NOV-1997; 97US-0065186.

XX 21-NOV-1997; 97US-0066364.

XX 04-JUN-1998; 98US-0088026.

PA	(GETH) GENENTECH INC.
XX	Fong S, Goddard A, Gurney AL, Tumas D, Wood WI;
PI	WPI; 1999-229499/19.
DR	N-PsDB; AAX37664.
DR	Composition containing novel polypeptide PRO245, its agonist or antagonist -
XX	Example 1; Fig 2; 177pp; English.
XX	This invention describes a novel composition containing (apart from a carrier or excipient), a novel PRO245 polypeptide (I), its agonist or antagonist, or their fragments, for modulating: (i) infiltration of inflammatory cells into tissue; (ii) an immune response; or (iii) T cell proliferation. The composition increases or decreases any of the effects (i)-(iii). The products of the invention have anti-inflammatory, anti-autoimmune and anti-diabetic activity. (I), and its (ant)agonists and their fragments, are used to treat immune-related diseases, particularly T cell-mediated diseases. The diseases treated include systemic lupus erythematosus, rheumatoid arthritis, juvenile chronic arthritis, spondyloarthropathies, systemic sclerosis (scleroderma), idiopathic inflammatory myopathies (dermatomyositis, polymyositis), Sjogren's syndrome, systemic vasculitis, sarcoidosis, autoimmune hemolytic anemia (immune pancytopenia, paroxysmal nocturnal hemoglobinuria), autoimmune thrombocytopenia (idiopathic thrombocytopenic purpura immune-mediated thrombocytopenia), thyroiditis (Grave's disease, Hashimoto's thyroiditis, juvenile lymphocytic thyroiditis, atrophic thyroiditis), diabetes mellitus, immune-mediated renal disease (glomerulonephritis, tubulointerstitial nephritis), multiple sclerosis, idiopathic demyelinating polyneuropathy, Guillain-Barre syndrome, chronic inflammatory demyelinating polyneuropathy, infectious hepatitis (hepatitis A, B, C, D, E and other non-hepatotropic viruses), autoimmune chronic active hepatitis, primary biliary cirrhosis, granulomatous hepatitis, and sclerosing cholangitis, inflammatory bowel disease (ulcerative colitis; Crohn's disease), gluten-sensitive enteropathy, and Whipple's disease. Autoimmune or immune-mediated skin diseases including bullous skin diseases, erythema multiforme, contact dermatitis, psoriasis, asthma, allergic rhinitis, atopic dermatitis, food hypersensitivity, urticaria, eosinophilic pneumonia, idiopathic pulmonary fibrosis, hyper sensitivity pneumonitis, and transplantation associated diseases (graft rejection, and graft-versus-host-disease). (I), its (ant)agonists or fragment can also be used as an adjuvant in treatment of tumors. Antibodies against (I) can also be used for diagnosing such diseases. This sequence represents the human PRO245 protein described in the invention.
CC	Sequence 312 AA;
XX	Query Match 83.3%; Score 230; DB 20; Length 312;
XX	Best Local Similarity 100.0%; Pred. No. 2.1e-217;
XX	Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY	37 SRLEWKKLGRSVFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCVSAPEOG 96
DB	59 SRLEWKKLGRSVFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCVSAPEOG 118
QY	97 QNLEEDTVTLEVLVAPVPSCVPSALSSTGVVELRCDKGNPAPETWFKDGI RLLEN 156
DB	119 QNLEEDTVTLEVLVAPVPSCVPSALSSTGVVELRCDKGNPAPETWFKDGI RLLEN 178
QY	157 PRIGSQSTNSYSYTNMTKTGLQTNTVS KLDTGYSCEARNISVG YRRCPGKRMQVDLNLIS 216
DB	179 PRIGSQSTNSYSYTNMTKTGLQTNTVS KLDTGYSCEARNISVG YRRCPGKRMQVDLNLIS 238
QY	217 GIITAAVVVALVISVCGLVGYCAQRKGYPFSKETSFOKSNSSSKATTMSEN 266
DB	239 GIITAAVVVALVISVCGLVGYCAQRKGYPFSKETSFOKSNSSSKATTMSEN 288

ID	AAY23324 standard; Protein; 312 AA.
XX	AAY23324;
XX	AC AAY23324;
DT	02-SEP-1999 (first entry)
XX	A33 related antigen PRO245.
DE	A33 related antigen PRO245.
XX	A33 related antigen; PRO301; PRO362; PRO245; inflammatory disease; tumour.
KW	Homo sapiens.
OS	WO9927098-A2.
PN	03-JUN-1999.
PD	20-NOV-1998; 98WO-US24855.
PF	17-SEP-1998; 98WO-US19437.
PR	21-NOV-1997; 97US-0066364.
PR	20-MAR-1998; 98US-0078936.
XX	(GETH) GENENTECH INC.
PA	Ashkenazi A, Fong S, Goddard A, Gurney AL, Napier WA;
PI	Tumas D, Wood WI;
PI	WPI; 1999-404743/34.
DR	N-PsDB; AAX81770.
DR	Antigens PRO301, PRO362 and PRO245 related to A33
FT	Example 3; Fig 11; 122pp; English.
XX	The specification describes A33 related antigens PRO301, PRO362 and PRO245. The methods and compositions of the invention are useful for the treatment and diagnosis of inflammatory disease and tumours in mammals. Such inflammatory diseases include of inflammatory bowel disease, systemic lupus erythematosus, rheumatoid arthritis, juvenile chronic arthritis, spondyloarthropathies, systemic sclerosis, scleroderma, idiopathic inflammatory myopathies, dermatomyositis, polymyositis, Sjogren's syndrome, systemic vaculitis, sarcoidosis, autoimmune hemolytic anemia, immune pancytopenia, paroxysmal nocturnal hemoglobinuria, autoimmune thrombocytopenia, idiopathic thrombocytopenic purpura, immune-mediated thrombocytopenia, thyroiditis, Grave's disease, Hashimoto's thyroiditis, juvenile lymphocytic thyroiditis, atrophic thyroiditis, diabetes mellitus, immune-mediated renal disease, glomerulonephritis, tubulointerstitial nephritis, multiple sclerosis, idiopathic demyelinating polyneuropathy, Guillain-Barre syndrome, chronic inflammatory demyelinating polyneuropathy, infectious hepatitis (hepatitis A, B, C, D, E and other non-hepatotropic viruses), autoimmune chronic active hepatitis, primary biliary cirrhosis, granulomatous hepatitis, and sclerosing cholangitis, inflammatory bowel disease (ulcerative colitis; Crohn's disease), gluten-sensitive enteropathy, and Whipple's disease. Autoimmune or immune-mediated skin diseases including bullous skin diseases, erythema multiforme, contact dermatitis, psoriasis, asthma, allergic rhinitis, atopic dermatitis, food hypersensitivity, urticaria, eosinophilic pneumonia, idiopathic pulmonary fibrosis, hyper sensitivity pneumonitis, and transplantation associated diseases (graft rejection, and graft-versus-host-disease). (I), its (ant)agonists or fragment can also be used as an adjuvant in treatment of tumors. Antibodies against (I) can also be used for diagnosing such diseases. This sequence represents the human PRO245 protein described in the invention.
CC	Sequence 312 AA;
XX	Query Match 83.3%; Score 230; DB 20; Length 312;
XX	Best Local Similarity 100.0%; Pred. No. 2.1e-217;
XX	Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY	37 SRLEWKKLGRSVFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCVSAPEOG 96
DB	59 SRLEWKKLGRSVFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCVSAPEOG 118
QY	97 QNLEEDTVTLEVLVAPVPSCVPSALSSTGVVELRCDKGNPAPETWFKDGI RLLEN 156
DB	119 QNLEEDTVTLEVLVAPVPSCVPSALSSTGVVELRCDKGNPAPETWFKDGI RLLEN 178
QY	157 PRIGSQSTNSYSYTNMTKTGLQTNTVS KLDTGYSCEARNISVG YRRCPGKRMQVDLNLIS 216
DB	179 PRIGSQSTNSYSYTNMTKTGLQTNTVS KLDTGYSCEARNISVG YRRCPGKRMQVDLNLIS 238
QY	217 GIITAAVVVALVISVCGLVGYCAQRKGYPFSKETSFOKSNSSSKATTMSEN 266
DB	239 GIITAAVVVALVISVCGLVGYCAQRKGYPFSKETSFOKSNSSSKATTMSEN 288

RESULT 12
AAY23324

37 SRLEWKKLGRSVFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCVSAPEOG 96
59 SRLEWKKLGRSVFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCVSAPEOG 118
97 QNLEEDTVTLEVLVAPVPSCVPSALSSTGVVELRCDKGNPAPETWFKDGI RLLEN 156
119 QNLEEDTVTLEVLVAPVPSCVPSALSSTGVVELRCDKGNPAPETWFKDGI RLLEN 178

QY 157 PRIGSQSTNSSYTMNTKTGTLQFNTVSKLDTGYSCEARNISVGYRCPGKRMQVDDLNIS 216
 |||||
 Db 179 PRIGSQSTNSSYTMNTKTGTLQFNTVSKLDTGYSCEARNISVGYRCPGKRMQVDDLNIS 238
 |||||
 QY 217 GIIAAVVVVALVISVCGLGVCYAQRKGYSKTSFQKSNSSSKATTMSN 266
 |||||
 Db 239 GIIAAVVVVALVISVCGLGVCYAQRKGYSKTSFQKSNSSSKATTMSN 288
 |||||
 RESULT 13
 AAY13354
 ID AAY13354 standard; Protein; 312 AA.
 XX
 AC AAY13354;
 XX
 DT 25-JUN-1999 (first entry)
 XX
 DE Amino acid sequence of protein PRO245.
 XX
 KW Secreted protein; transmembrane protein; human; enterocolitis;
 KW Zollinger-Ellison syndrome; gastrointestinal ulceration;
 KW congenital microvillus atrophy; skin disease; cell growth;
 KW abnormal keratinocyte differentiation; psoriasis; epithelial cancer;
 KW Parkinson's disease; Alzheimer's disease; ALS; neuropathy;
 KW fibromodulin; dermal scarring; Usher Syndrome; Atrophla areata;
 KW anti-thrombotic; wound healing; tissue repair.
 XX
 OS Homo sapiens.
 XX
 PN WO9914328-A2.
 XX
 PD 25-MAR-1999.
 XX
 PF 16-SEP-1998; 98WO-US19330.
 XX
 PR 25-NOV-1997; 97US-0066840.
 PR 17-SEP-1997; 97US-0059113.
 PR 17-SEP-1997; 97US-0059115.
 PR 17-SEP-1997; 97US-0059117.
 PR 17-SEP-1997; 97US-0059119.
 PR 17-SEP-1997; 97US-0059121.
 PR 17-SEP-1997; 97US-0059122.
 PR 17-SEP-1997; 97US-0059184.
 PR 18-SEP-1997; 97US-0059263.
 PR 18-SEP-1997; 97US-0059266.
 PR 15-OCT-1997; 97US-0062125.
 PR 17-OCT-1997; 97US-0062285.
 PR 17-OCT-1997; 97US-0062287.
 PR 21-OCT-1997; 97US-0063486.
 PR 24-OCT-1997; 97US-0062814.
 PR 24-OCT-1997; 97US-0062816.
 PR 24-OCT-1997; 97US-0063045.
 PR 24-OCT-1997; 97US-0063120.
 PR 24-OCT-1997; 97US-0063121.
 PR 24-OCT-1997; 97US-0063127.
 PR 24-OCT-1997; 97US-0063128.
 PR 27-OCT-1997; 97US-0063329.
 PR 27-OCT-1997; 97US-0063327.
 PR 28-OCT-1997; 97US-0063541.
 PR 28-OCT-1997; 97US-0063542.
 PR 28-OCT-1997; 97US-0063544.
 PR 28-OCT-1997; 97US-0063549.
 PR 28-OCT-1997; 97US-0063550.
 PR 29-OCT-1997; 97US-0063564.
 PR 29-OCT-1997; 97US-0063435.
 PR 29-OCT-1997; 97US-0063704.
 PR 29-OCT-1997; 97US-0063732.
 PR 29-OCT-1997; 97US-0063738.
 PR 29-OCT-1997; 97US-0063734.
 PR 29-OCT-1997; 97US-0064215.
 PR 29-OCT-1997; 97US-0063735.
 PR 31-OCT-1997; 97US-0063870.

PR 31-OCT-1997; 97US-0064103.
 PR 03-NOV-1997; 97US-0064248.
 PR 07-NOV-1997; 97US-0064809.
 PR 12-NOV-1997; 97US-0065186.
 PR 17-NOV-1997; 97US-0065846.
 PR 18-NOV-1997; 97US-0065893.
 PR 21-NOV-1997; 97US-0066120.
 PR 21-NOV-1997; 97US-0066364.
 PR 24-NOV-1997; 97US-0066772.
 PR 24-NOV-1997; 97US-0066466.
 PR 24-NOV-1997; 97US-0066770.
 PR 24-NOV-1997; 97US-0066511.
 PR 24-NOV-1997; 97US-0066453.
 XX
 PA (GETH) GENENTECH INC.
 XX
 XX
 PI Chen J, Goddard A, Gurney AL, Pennica D, Wood WI, Yuan J;
 XX
 XX WPI; 1999-229533/19.
 DR N-PSDB; AAX52225.
 XX
 PT New isolated human genes and polypeptides used in, e.g. treatment of
 PT gastrointestinal ulceration
 XX
 PS Claim 12; Fig 24; 320pp; English.
 XX
 CC AAY13344-403 represent secreted and transmembrane human proteins.
 CC The cDNA sequences are obtained from cDNA libraries, prepared from
 CC fetal lung, fetal kidney, fetal brain, fetal liver and fetal retina.
 CC The encoded polypeptides have specific uses based on their homology to
 CC known polypeptides, e.g. PRO211 and PRO217 can be used for disorders
 CC associated with the preservation and maintenance of gastrointestinal
 CC mucosa and the repair of acute and chronic mucosal lesions
 CC (e.g. enterocolitis, Zollinger-Ellison syndrome, gastrointestinal
 CC ulceration and congenital microvillus atrophy), skin diseases associated
 CC with abnormal keratinocyte differentiation (e.g. psoriasis, epithelial
 CC cancers such as lung squamous cell carcinoma of the vulva and gliomas),
 CC potent effects on cell growth and development, diseases related to
 CC growth or survival of nerve cells including Parkinson's disease,
 CC Alzheimer's disease, ALS, neuropathies or cancer. PRO265 can be used as
 CC for fibromodulin, e.g. for reducing dermal scarring. PRO264 can be used
 CC as a target for anti-tumor drugs. PRO533 may be used in the treatment
 CC of Usher Syndrome or Atrophla areata; PRO269 can be used as an
 CC anti-thrombotic agent; PRO287 polypeptides and portions may have
 CC therapeutic applications in wound healing and tissue repair; PRO317 can
 CC be used for treating problems of the kidney, uterus, endometrium, blood
 CC vessels, or related tissue, e.g. in the heart of genital tract.
 XX
 SQ Sequence 312 AA;
 Query Match 83.3%; Score 230; DB 20; Length 312;
 Best Local Similarity 100.0%; Pred. No. 2.1e-217;
 Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 37 SRLEWKKLGRSVSFVYQOITLQGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
 |||||
 Db 59 SRLEWKKLGRSVSFVYQOITLQGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
 |||||
 QY 97 QNLEEDTTLVLVAPVPSCEVPSSALSGTVELRCODKEGNPAPEYTWKDGIRLLEN 156
 |||||
 Db 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVELRCODKEGNPAPEYTWKDGIRLLEN 178
 |||||
 QY 157 PRIGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNISVGYRCPGKRMQVDDLNIS 216
 |||||
 Db 179 PRIGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNISVGYRCPGKRMQVDDLNIS 238
 |||||
 QY 217 GIIAAVVVVALVISVCGLGVCYAQRKGYSKTSFQKSNSSSKATTMSN 266
 |||||
 Db 239 GIIAAVVVVALVISVCGLGVCYAQRKGYSKTSFQKSNSSSKATTMSN 288
 |||||

RESULT 14
 AAB33421

ID AAB33421 standard; Protein; 312 AA.
 AC AAB33421;
 XX
 DT 29-JAN-2001 (first entry)
 XX
 DE Human PRO245 protein UNQ219 SEQ ID NO:36.
 DE
 XX Human; immune related disease; diagnosis; antinflammatory; cardiant;
 KW dermatological; antiarthritic; antirheumatic; immunosuppressive;
 KW haemostatic; antithyroid; antidiabetic; neutropic; neuroprotective;
 KW antianemic; hepatocytic; virucide; antiposrotic; anti allergic;
 KW antiaethmatic; systemic lupus erythematosus; rheumatoid arthritis;
 KW osteoarthritis; spondyloarthropathy; systemic sclerosis; sarcoidosis;
 KW idiopathic inflammatory myopathy; Sjogren's syndrome; thyroiditis;
 KW systemic vasculitis; autoimmune haemolytic anaemia; diabetes mellitus;
 KW autoimmune thrombocytopaenia; immune-mediated renal disease;
 KW demyelinating disease; hepatobiliary disease; Whipple's disease;
 KW inflammatory bowel disease; gluten-sensitive enteropathy;
 KW autoimmune disease; immune-mediated skin disease; allergic disease;
 KW immunological disease; transplantation associated disease;
 KW graft rejection; graft-versus-host-disease.
 XX
 OS Homo sapiens.
 XX
 PN WO200053758-A2.
 XX
 XX 14-SEP-2000.
 XX
 XX 02-MAR-2000; 2000WO-US05841.
 PR 08-MAR-1999; 99WO-US05028.
 PR 10-MAR-1999; 99US-0123618.
 PR 12-MAR-1999; 99US-0123957.
 PR 23-MAR-1999; 99US-0125775.
 PR 12-APR-1999; 99US-0128849.
 PR 20-APR-1999; 99WO-US08615.
 PR 28-APR-1999; 99US-0131445.
 PR 04-MAY-1999; 99US-0132371.
 PR 14-MAY-1999; 99US-0134287.
 PR 02-JUN-1999; 99WO-US12252.
 PR 23-JUN-1999; 99US-0141037.
 PR 20-JUL-1999; 99US-0144758.
 PR 26-JUL-1999; 99US-0145698.
 PR 28-JUL-1999; 99US-0146222.
 PR 01-SEP-1999; 99WO-US20111.
 PR 08-SEP-1999; 99WO-US20594.
 PR 13-SEP-1999; 99WO-US20944.
 PR 15-SEP-1999; 99WO-US21090.
 PR 15-SEP-1999; 99WO-US21547.
 PR 05-OCT-1999; 99WO-US23089.
 PR 29-OCT-1999; 99US-0162506.
 PR 29-NOV-1999; 99WO-US28214.
 PR 30-NOV-1999; 99WO-US28313.
 PR 30-NOV-1999; 99WO-US28409.
 PR 01-DEC-1999; 99WO-US28301.
 PR 01-DEC-1999; 99WO-US28634.
 PR 02-DEC-1999; 99WO-US28551.
 PR 02-DEC-1999; 99WO-US28564.
 PR 02-DEC-1999; 99WO-US28565.
 PR 16-DEC-1999; 99WO-US30095.
 PR 20-DEC-1999; 99WO-US30999.
 PR 30-DEC-1999; 99WO-US31274.
 PR 05-JAN-2000; 2000WO-US00219.
 PR 06-JAN-2000; 2000WO-US00277.
 PR 06-JAN-2000; 2000WO-US00376.
 PR 11-FEB-2000; 2000WO-US03565.
 PR 18-FEB-2000; 2000WO-US04341.
 PR 18-FEB-2000; 2000WO-US04342.
 PR 22-FEB-2000; 2000WO-US04414.

(GETH) GENENTECH INC.

PI Ashkenazi AJ, Baker KP, Goddard A, Gurney AL, Hebert C, Henzel W;
 PI Kabakoff RC, Lu Y, Pan J, Pennica D, Shelton DL, Smith V;
 PI Stewart TA, Tumas D, Watanabe CK, Wood WI, Yan M;
 DR WPI; 2000-572271/53.
 DR N-ESDB; AAC58586.
 XX
 PT Sixty four PRO polypeptides, useful in the diagnosis and treatment of
 PT immune related disorders, e.g. systemic lupus erythematosus, rheumatoid
 PT arthritis, osteoarthritis, thyroiditis and diabetes mellitus -
 XX
 PS Claim 33; Fig 16; 309pp; English.
 XX
 CC The present invention describes sixty four human PRO proteins which can
 CC be used in the treatment of immune related diseases. The human PRO
 CC proteins, anti-PRO antibodies, agonists and antagonists are useful for
 CC treating and diagnosing immune related disorders. The disorders are
 CC selected from systemic lupus erythematosus, rheumatoid arthritis,
 CC osteoarthritis, juvenile chronic arthritis, spondyloarthropathies,
 CC systemic sclerosis, idiopathic inflammatory myopathies, Sjogren's
 CC syndrome, systemic vasculitis, sarcoidosis, autoimmune haemolytic
 CC anaemia, autoimmune thrombocytopaenia, thyroiditis, diabetes mellitus,
 CC immune-mediated renal disease, demyelinating diseases of the central
 CC and peripheral nervous systems, hepatobiliary diseases, inflammatory
 CC bowel disease, gluten-sensitive enteropathy and Whipple's disease,
 CC autoimmune or immune-mediated skin diseases, allergic diseases,
 CC immunological diseases of the lung, and transplantation associated
 CC diseases including graft rejection and graft-versus-host-disease.
 CC AAC58397 to AAC58578 represent PCR primers and hybridisation probes used
 CC in the isolation of human PRO sequences. AAC58579 to AAC58642 and
 CC AAB33414 to AAB33477 represent human PRO polynucleotide and protein
 CC sequences given in the exemplification of the present invention.
 XX
 SQ Sequence 312 AA;

Query Match 83.3%; Score 230; DB 21; Length 312;
 Best Local Similarity 100.0%; Pred. No. 2.1e-217;
 Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 37 SRLEWKKLGRSVSFVYVYQOTLQDFKRAEMIDFNIRIKNVTNRDAGKYRCEVSAPSQG 96
 Db 59 SRLEWKKLGRSVSFVYVYQOTLQDFKRAEMIDFNIRIKNVTNRDAGKYRCEVSAPSQG 118
 Qy 97 QNLEEDTVTLEVLVAPVAPVPSCEVPSSALSGTVVRLRCQDKGNPAPEYTWFKDGIIRLEN 156
 Db 119 QNLEEDTVTLEVLVAPVAPVPSCEVPSSALSGTVVRLRCQDKGNPAPEYTWFKDGIIRLEN 178
 Qy 157 PRLGSQSTNSSTYTNMTKTGTLQFNVTVSKLDTGEYSCEARNISVGYRRCFGKRMQVDDLNIS 216
 Db 179 PRLGSQSTNSSTYTNMTKTGTLQFNVTVSKLDTGEYSCEARNISVGYRRCFGKRMQVDDLNIS 238
 Qy 217 GIITAAVVVVVALVISVCGLVGYCAQRKGYSFQKSNSSSKATTWSEN 266
 Db 239 GIITAAVVVVVALVISVCGLVGYCAQRKGYSFQKSNSSSKATTWSEN 288

RESULT 15
 AAB24401
 ID AAB24401 standard; Protein; 312 AA.
 AC AAB24401;
 XX
 XX 07-NOV-2000 (first entry)
 DT
 XX Human PRO245 protein sequence SEQ ID NO:67.
 DE
 XX Human; PRO; promotion; inhibition; angiogenesis; cardiovascularisation;
 KW diagnosis; trauma; wound; cancer; atherosclerosis; cardiac hypertrophy;
 KW angiogenic; proliferative; cardiant; cardiovascular; antiatherosclerotic;
 KW cyostatic; gene therapy; vaccine.
 XX
 OS Homo sapiens.
 XX

PN WO200032221-A2.
XX PD 08-JUN-2000.
XX PF 30-NOV-1999; 99WO-US28313.
XX PR 01-DEC-1998; 98WO-US25108.
PR 16-DEC-1998; 98US-0112850.
PR 12-JAN-1999; 99US-0115554.
PR 08-MAR-1999; 99WO-US05028.
PR 12-MAR-1999; 99US-0123957.
PR 28-APR-1999; 99US-0131445.
PR 14-MAY-1999; 99US-0134287.
PR 02-JUN-1999; 99WO-US12252.
PR 23-JUN-1999; 99US-0141037.
PR 20-JUL-1999; 99US-0144758.
PR 26-JUL-1999; 99US-0145698.
PR 01-SEP-1999; 99WO-US20111.
PR 08-SEP-1999; 99WO-US20594.
PR 13-SEP-1999; 99WO-US20944.
PR 15-SEP-1999; 99WO-US21090.
PR 15-SEP-1999; 99WO-US21547.
PR 05-OCT-1999; 99WO-US23089.
PR 29-OCT-1999; 99US-0162506.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Ferrara N, Gerber H, Hillan KJ, Goddard A;
PI Godowski PJ, Gurney AL, Klein RD, Kuo SS, Paoni NF, Smith V;
PI Watanabe CK, Williams PM, Wood WI;
XX
DR WPI, 2000-412154/35.
DR N-FSDB; AAA77562.
XX
PT Nucleic acids encoding PRO polypeptides useful for preventing,
PT diagnosing and treating diagnosing a cardiovascular, endothelial or
PT angiogenic disorders in mammals -
XX
PS Claim 72; Fig 28; 315pp; English.
XX
CC The present invention describes nucleic acids encoding PRO polypeptides
CC useful for preventing, diagnosing and treating diagnosing a
CC cardiovascular, endothelial or angiogenic disorder in mammals by
CC modulating cell proliferation, angiogenesis and cardiovascularisation,
CC and for identifying agonists and antagonists of these processes. The
CC nucleic acids and the proteins they encode may be used in the
CC prevention, treatment and diagnosis of diseases associated with
CC inappropriate PRO expression such as cardiovascular, endothelial or
CC angiogenic disorders in mammals (e.g. atherosclerosis, cancers and
CC cardiac hypertrophy). For example, the nucleic acids (NCs) and vectors
CC containing them and the PRO polypeptide may be used to treat disorders
CC associated with decreased PRO expression. AAA77510 to AAA77721 and
CC AAB24388 to AAB24435 represent nucleotide and protein sequences used in
CC the exemplification of the present invention.
XX
SQ Sequence 312 AA;

Query Match 83.3%; Score 230; DB 21; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 37 SRLEWKKLGRSVGFVYQQTLQGDFFKNRAEMIDFNIRIKNVTBDSAGKYRCEVSAPSEQ 96
DB 59 SRLEWKKLGRSVGFVYQQTLQGDFFKNRAEMIDFNIRIKNVTBDSAGKYRCEVSAPSEQ 118

QY 97 QNLEEDTVTLVLVLVAPVPSCEVPSSALSCTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 156
DB 119 QNLEEDTVTLVLVLVAPVPSCEVPSSALSCTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178

QY 157 PRIGSOSTNSSTYTNMTKTGLQNTVSKLDTGEYSCEARNVGVRRCPGKRMQVDDLNIS 216
DB 179 PRIGSOSTNSSTYTNMTKTGLQNTVSKLDTGEYSCEARNVGVRRCPGKRMQVDDLNIS 238

QY 217 GTIAAAVVVVVALVISVCGLGVCYVAORKGYFSKETSFKNSNSSSKATTMSN 266
DB 239 GTIAAAVVVVVALVISVCGLGVCYVAORKGYFSKETSFKNSNSSSKATTMSN 288

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OM protein - protein search, using sw model

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Searched: 328717 seqs, 42310858 residues

Word-size : 30
Total number of hits satisfying chosen parameters: 2

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Maximum DB seq length: 2000000000
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Post-processing: Listing first 45 summaries

Database : Issued Patents AA:*

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2: 2: /cgn2_6/prodata1/iaa/5B COMB pep: *
3: 3: /cgn2_6/prodata1/iaa/6A COMB pep: *
4: 4: /cgn2_6/prodata1/iaa/6B COMB pep: *
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6: 6: /cgn2_6/prodata1/iaa/backfiles1 pep: *

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	274	99.3	298	4	US-09-152-060-76 Sequence 76, Appl
2	230	83.3	312	4	US-09-254-465A-9 Sequence 9, Appl

ALIGNMENTS

```

RESULT 1
US-09-152-060-76
; Sequence 76, Application US/09152060
; Patent No. 6448230
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003Pl.US
; CURRENT APPLICATION NUMBER: US/09/152,060
; CURRENT FILING DATE: 1998-09-11
; EARLIER APPLICATION NUMBER: FCT/US98/04858
; EARLIER FILING DATE: 1998-03-12
; EARLIER APPLICATION NUMBER: 60/040,762
; EARLIER FILING DATE: 1997-03-14
; EARLIER APPLICATION NUMBER: 60/040,710
; EARLIER FILING DATE: 1997-03-14
; EARLIER APPLICATION NUMBER: 60/050,934
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/048,100
; EARLIER FILING DATE: 1997-05-30

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? EARLIER APPLICATION NUMBER: 60/048,357
? EARLIER FILING DATE: 1997-05-30
? EARLIER APPLICATION NUMBER: 60/048,189
? EARLIER FILING DATE: 1997-05-30
? EARLIER APPLICATION NUMBER: 60/057,765
? EARLIER FILING DATE: 1997-09-05
? EARLIER APPLICATION NUMBER: 60/048,970
? EARLIER FILING DATE: 1997-06-06
? EARLIER APPLICATION NUMBER: 60/068,368
? EARLIER FILING DATE: 1997-12-19
? NUMBER OF SEQ ID NOS: 118
? SOFTWARE: PatentIn Ver. 2.0
? SEQ ID NO 76
? LENGTH: 298
? TYPE: PRT
? ORGANISM: Homo sapiens
? FEATURE:
? NAME/KEY: SITE
? LOCATION: (42)
? OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
? FEATURE:
? NAME/KEY: SITE
? LOCATION: (58)
? OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
? US-09-152-060-76

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Query Match	99.3%;	Score 274;	DB 4;	Length 298;		
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Db	23	YHKAYGFSAPKQQQVVTA	VAYQAEALLACKTPKKT	VXSRLEWKKLGRSVSFVYYQQT	LOGD 82	
Qy	61	FKRAEMIDNRIIRIKN	TRSDAGKYRCEVSAPSE	QOGNLEBDVT	LEVIVAPVPSEVP 120	
Db	83	FKRAEMIDNRIIRIKN	TRSDAGKYRCEVSAPSE	QOGNLEBDVT	LEVIVAPVPSEVP 142	
Qy	121	SSALSGTIVVELRCQD	KEGNAPEYTWFKGIR	LLENPRLGQSQTNS	SSYTWNTKTGT	LQFN 180
Db	143	SSALSGTIVVELRCQD	KEGNAPEYTWFKGIR	LLENPRLGQSQTNS	SSYTWNTKTGT	LQFN 202
Qy	181	TVSKLDTGEYSCARN	SVGYRRCPGKRMQV	DDLNISGIIAAV	VVVALVIVS	CGLGVCYQAQ 240
Db	203	TVSKLDTGEYSCARN	SVGYRRCPGKRMQV	DDLNISGIIAAV	VVVALVIVS	CGLGVCYQAQ 262
Qy	241	RKGYFSKETSFQK	SNSSKATTMS	ENDFKH	TKSFII 276	
Db	263	RKGYFSKETSFQK	SNSSKATTMS	ENDFKH	TKSFII 298	

RESULT 2
US-09-254-465A-9
; Sequence 9, Application US/09254465A
; Patent No. 6410708
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
; FILE REFERENCE: P1216R1 (US)
; CURRENT APPLICATION NUMBER: US/09/254,465A
; CURRENT FILING DATE: 1999-03-05
; PRIOR APPLICATION NUMBER: PCT/US98/24855
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR FILING DATE: 1997-11-21

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; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 9
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-254-465A-9

Query Match      83.3%; Score 230; DB 4; Length 312;
Best Local Similarity 100.0%; Pred. No. 4.5e-218;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 37 SRLEWKKLGRSVSFVYQQTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
Db 59 SRLEWKKLGRSVSFVYQQTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

QY 97 QNLEEDTVTLEVLVAPVPSCEVPSSALSGTVVVELRCQDKEGNPAPEYTWFKDGIRLLEN 156
Db 119 QNLEEDTVTLEVLVAPVPSCEVPSSALSGTVVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178

QY 157 PRIGSOSTNSSYTMNTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNIS 216
Db 179 PRIGSOSTNSSYTMNTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNIS 238

QY 217 GIITAAVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSSEN 266
Db 239 GIITAAVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSSEN 288
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Search completed: December 9, 2003, 17:39:14
Job time : 14.4251 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: December 9, 2003, 17:38:14 ; Search time 33.1777 Seconds
(without alignments)
1547.168 Million cell updates/sec

Title: US-09-852-797-76_COPY_23_298

Perfect score: 276
Sequence: 1 YHKAYGSAFQDQVVAVX.....SSKATTSENDFKTKSFII 276

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 684280 seqs, 185983659 residues

Wordsize: 30

Total number of hits satisfying chosen parameters: 489

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : Published Applications AA:

- 1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
- 2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
- 3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
- 4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep.*
- 5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep.*
- 6: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep.*
- 7: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep.*
- 8: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep.*
- 9: /cgn2_6/ptodata/1/pubpaa/US09A_PUBCOMB.pep.*
- 10: /cgn2_6/ptodata/1/pubpaa/US09B_PUBCOMB.pep.*
- 11: /cgn2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep.*
- 12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
- 13: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep.*
- 14: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep.*
- 15: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep.*
- 16: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
- 17: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
- 18: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	274	99.3	298	9	US-09-853-161-76
2	274	99.3	298	9	US-09-852-659A-76
3	274	99.3	298	10	US-09-852-797-76
4	240	87.0	298	9	US-09-745-763-38
5	240	87.0	298	9	US-09-799-777-30
6	240	87.0	298	15	US-10-139-849-2
7	240	87.0	298	16	US-10-192-791-2
8	230	83.3	312	10	US-09-909-320-64
9	230	83.3	312	10	US-09-909-088B-64
10	230	83.3	312	10	US-09-905-291A-64
11	230	83.3	312	10	US-09-953-499-9
12	230	83.3	312	10	US-09-902-853-64
13	230	83.3	312	10	US-09-907-824-64
14	230	83.3	312	10	US-09-907-841-64
15	230	83.3	312	11	US-09-904-011-64

16	230	83.3	312	11	US-09-906-742-64
17	230	83.3	312	11	US-09-906-838-64
18	230	83.3	312	11	US-09-907-613-64
19	230	83.3	312	11	US-09-907-942-64
20	230	83.3	312	11	US-09-904-859-64
21	230	83.3	312	11	US-09-909-204-64
22	230	83.3	312	11	US-09-904-820-64
23	230	83.3	312	11	US-09-904-786-64
24	230	83.3	312	11	US-09-906-646-64
25	230	83.3	312	11	US-09-906-700-64
26	230	83.3	312	11	US-09-903-786-64
27	230	83.3	312	11	US-09-902-903-64
28	230	83.3	312	11	US-09-903-749A-64
29	230	83.3	312	11	US-09-904-119-64
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33	230	83.3	312	11	US-09-905-056-64
34	230	83.3	312	11	US-09-909-064-64
35	230	83.3	312	11	US-09-904-462-64
36	230	83.3	312	11	US-09-907-925-64
37	230	83.3	312	11	US-09-902-692-64
38	230	83.3	312	11	US-09-903-520-64
39	230	83.3	312	11	US-09-905-056-64
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41	230	83.3	312	11	US-09-904-553-64
42	230	83.3	312	11	US-09-905-381-64
43	230	83.3	312	11	US-09-905-088-64
44	230	83.3	312	11	US-09-907-575-64
45	230	83.3	312	11	US-09-905-075-64
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ALIGNMENTS

RESULT 1
US-09-853-161-76
; Sequence 76, Application US/09853161
; Patent No. US20020076756A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003P3
; CURRENT APPLICATION NUMBER: US/09/853,161
; CURRENT FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/265,583
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 09/152,060
; PRIOR FILING DATE: 1998-09-11
; PRIOR APPLICATION NUMBER: PCT/US98/04858
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/040,710
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/050,934
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,100
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,357
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,189
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/057,765
; PRIOR FILING DATE: 1997-09-05
; PRIOR APPLICATION NUMBER: 60/048,970
; PRIOR FILING DATE: 1997-06-06
; PRIOR APPLICATION NUMBER: 60/068,368
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 118
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76
; LENGTH: 298

TYPE: PRT
ORGANISM: Homo sapiens
NAME/KEY: SITE
LOCATION: (42)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (58)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-853-161-76

Query Match 99.3%; Score 274; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 4.5e-260;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 YHKAIGFSAPKDDQVAVYQEAIALACKTPKTVXSRLEWKLGSRVSFYVYQOTLQGD 60
DB 23 YHKAIGFSAPKDDQVAVYQEAIALACKTPKTVXSRLEWKLGSRVSFYVYQOTLQGD 82
QY 61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSGQGNLEEDTTLVLELVAPVPSCEVP 120
DB 83 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSGQGNLEEDTTLVLELVAPVPSCEVP 142
QY 121 SSALSGTIVELRCQDKEGNPAPEYTWFKDGIIRLLENPRLGSGQSTNSSTMTKTGTLOFN 180
DB 143 SSALSGTIVELRCQDKEGNPAPEYTWFKDGIIRLLENPRLGSGQSTNSSTMTKTGTLOFN 202
QY 181 TVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDNLNIGIIAAVAVVVALVISVCGLGVCYQA 240
DB 203 TVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDNLNIGIIAAVAVVVALVISVCGLGVCYQA 262
QY 241 RKGYSKETSFOKSNSSSKATTMTSENDFKHTKSFII 276
DB 263 RKGYSKETSFOKSNSSSKATTMTSENDFKHTKSFII 298

RESULT 2

US-09-852-659A-76
Sequence 76, Application US/09852659A
Patent No. US20020077287A1
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: 28 Human Secreted Proteins
FILE REFERENCE: P2003P4
CURRENT APPLICATION NUMBER: US/09/852.659A
CURRENT FILING DATE: 2001-05-11
PRIOR FILING DATE: 2001-02-02
PRIOR APPLICATION NUMBER: 60/265,583
PRIOR FILING DATE: 2001-02-02
PRIOR APPLICATION NUMBER: 09/152,060
PRIOR FILING DATE: 1998-09-11
PRIOR APPLICATION NUMBER: PCT/US98/04858
PRIOR FILING DATE: 1998-03-12
PRIOR APPLICATION NUMBER: 60/040,762
PRIOR FILING DATE: 1997-03-14
PRIOR APPLICATION NUMBER: 60/040,710
PRIOR FILING DATE: 1997-03-14
PRIOR APPLICATION NUMBER: 60/050,934
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/048,100
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/048,357
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/048,189
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/057,765
PRIOR FILING DATE: 1997-09-05
PRIOR APPLICATION NUMBER: 60/048,970
PRIOR FILING DATE: 1997-06-06
PRIOR APPLICATION NUMBER: 60/068,368
PRIOR FILING DATE: 1997-12-19
NUMBER OF SEQ ID NOS: 121
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 76

LENGTH: 298
TYPE: PRT
ORGANISM: Homo sapiens
NAME/KEY: SITE
LOCATION: (42)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (58)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-852-659A-76

Query Match 99.3%; Score 274; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 4.5e-260;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 YHKAIGFSAPKDDQVAVYQEAIALACKTPKTVXSRLEWKLGSRVSFYVYQOTLQGD 60
DB 23 YHKAIGFSAPKDDQVAVYQEAIALACKTPKTVXSRLEWKLGSRVSFYVYQOTLQGD 82
QY 61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSGQGNLEEDTTLVLELVAPVPSCEVP 120
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QY 121 SSALSGTIVELRCQDKEGNPAPEYTWFKDGIIRLLENPRLGSGQSTNSSTMTKTGTLOFN 180
DB 143 SSALSGTIVELRCQDKEGNPAPEYTWFKDGIIRLLENPRLGSGQSTNSSTMTKTGTLOFN 202
QY 181 TVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDNLNIGIIAAVAVVVALVISVCGLGVCYQA 240
DB 203 TVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDNLNIGIIAAVAVVVALVISVCGLGVCYQA 262
QY 241 RKGYSKETSFOKSNSSSKATTMTSENDFKHTKSFII 276
DB 263 RKGYSKETSFOKSNSSSKATTMTSENDFKHTKSFII 298

RESULT 3

US-09-852-797-76
Sequence 76, Application US/09852797
Patent No. US20020172994A1
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: 28 Human Secreted Proteins
FILE REFERENCE: P2003P2
CURRENT APPLICATION NUMBER: US/09/852.797
CURRENT FILING DATE: 2001-05-11
PRIOR FILING DATE: 2001-02-02
PRIOR APPLICATION NUMBER: 60/265,583
PRIOR FILING DATE: 2001-02-02
PRIOR APPLICATION NUMBER: 09/152,060
PRIOR FILING DATE: 1998-09-11
PRIOR APPLICATION NUMBER: PCT/US98/04858
PRIOR FILING DATE: 1998-03-12
PRIOR APPLICATION NUMBER: 60/040,762
PRIOR FILING DATE: 1997-03-14
PRIOR APPLICATION NUMBER: 60/040,710
PRIOR FILING DATE: 1997-03-14
PRIOR APPLICATION NUMBER: 60/050,934
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/048,100
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/048,357
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/048,189
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/057,765
PRIOR FILING DATE: 1997-09-05
PRIOR APPLICATION NUMBER: 60/048,970
PRIOR FILING DATE: 1997-06-06
PRIOR APPLICATION NUMBER: 60/068,368
PRIOR FILING DATE: 1997-12-19
NUMBER OF SEQ ID NOS: 118

SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 76
LENGTH: 298
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SITE
LOCATION: (42)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (58)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-852-797-76

Query Match 99.3%; Score 274; DB 10; Length 298;
Best Local Similarity 100.0%; Pred. No. 4.5e-260;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YHKAYGSAPKQDVVAVYQEAAILACKTPKKTXXSRLEWKKLGRSVSFYVYQQTLOGD 60
DB 23 YHKAYGSAPKQDVVAVYQEAAILACKTPKKTXXSRLEWKKLGRSVSFYVYQQTLOGD 82
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DB 83 FKRAEMIDNIRIKNVTSDAGKYRCEVSGAPSEQONLEEDTTLVLVAPVPSCEVP 142
QY 121 SSALSGTVVLCRCQDEKGNPAPEYTWFKDGIRLLENPRLSQSTNSSTYTNKTTGTLOFN 180
DB 143 SSALSGTVVLCRCQDEKGNPAPEYTWFKDGIRLLENPRLSQSTNSSTYTNKTTGTLOFN 202
QY 181 TVSKLDTGEYSCBARNVGYRRCGKGMQVDDNLNISGIIAAVVVVALVIVSGLGVGYAQ 240
DB 203 TVSKLDTGEYSCBARNVGYRRCGKGMQVDDNLNISGIIAAVVVVALVIVSGLGVGYAQ 262
QY 241 RKGYFSKTSFQKSNSSSKATTMSNDPKHTKSFII 276
DB 263 RKGYFSKTSFQKSNSSSKATTMSNDPKHTKSFII 298

RESULT 4

US-09-745-763-38
Sequence 38, Application US/09745763
Patent No. US20020065394A1

GENERAL INFORMATION:

APPLICANT: Jacobs, Kenneth
McCoy, John M.
LaVallie, Edward R.
Collins-Racie, Lisa A.
Evans, Cheryl
Metberg, David
Treacy, Maurice
Spaulding, Vikki
TITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES
ENCODING THEM

NUMBER OF SEQUENCES: 219

CORRESPONDENCE ADDRESS:

ADDRESSEE: Genetics Institute, Inc.
STREET: 87 CambridgePark Drive
CITY: Cambridge
STATE: MA
COUNTRY: U.S.A.
ZIP: 02140

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA: US/09/745,763
APPLICATION NUMBER: US/09/745,763
FILING DATE: 18-Jun-2000
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Sprunger, Suzanne A.

REGISTRATION NUMBER: 41,323
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 498-8284
TELEFAX: (617) 876-5851
INFORMATION FOR SEQ ID NO: 38:
SEQUENCE CHARACTERISTICS:
LENGTH: 298 amino acids
TYPE: amino acid
STRANDEDNESS: <Unknown>
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 38:
US-09-745-763-38

Query Match 87.0%; Score 240; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 9.2e-227;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 37 SRLEWKKLGRSVSFYVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPEQ 96
DB 59 SRLEWKKLGRSVSFYVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPEQ 118
QY 97 QNLEEDTTLVLVAPVPSCEVPSSALSCTVVELRCQDEKGNPAPEYTWFKDGIRLLEN 156
DB 119 QNLEEDTTLVLVAPVPSCEVPSSALSCTVVELRCQDEKGNPAPEYTWFKDGIRLLEN 178
QY 157 PRGSGSTNSSTYTNKTTGTLOFNTVSKLDTGEYSCBARNVGYRRCGKGMQVDDNLNIS 216
DB 179 PRGSGSTNSSTYTNKTTGTLOFNTVSKLDTGEYSCBARNVGYRRCGKGMQVDDNLNIS 238
QY 217 GIITAAVVVVALVIVSGLGVGYAQRYGYSKTSFQKSNSSSKATTMSNDPKHTKSFII 276
DB 239 GIITAAVVVVALVIVSGLGVGYAQRYGYSKTSFQKSNSSSKATTMSNDPKHTKSFII 298

RESULT 5

US-09-799-777-30
Sequence 30, Application US/09799777
Patent No. US20020091244A1

GENERAL INFORMATION:

APPLICANT: Lal, Preeti
Hillman, Jennifer L.
Corley, Neil C.
Guegler, Karl J.
Baugh, Mariah
Sather, Susan
Shah, Purvi
TITLE OF INVENTION: HUMAN SIGNAL PEPTIDE-CONTAINING PROTEINS
NUMBER OF SEQUENCES: 154
CORRESPONDENCE ADDRESS:
ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
STREET: 3174 PORTER DRIVE
CITY: PALO ALTO
STATE: CALIFORNIA
COUNTRY: USA
ZIP: 94304

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
CURRENT APPLICATION DATA: US/09/799,777
APPLICATION NUMBER: US/09/799,777
FILING DATE: 06-Mar-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/002,485
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: BILLINGS, LUCY J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PP-0459 US
TELECOMMUNICATION INFORMATION:

TELEPHONE: (650) 855-0555
TELEFAX: (650) 845-4166
INFORMATION FOR SEQ ID NO: 30:
SEQUENCE CHARACTERISTICS:
LENGTH: 298 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
IMMEDIATE SOURCE:
LIBRARY: DUDNOT02
CLONE: 1704050
SEQUENCE DESCRIPTION: SEQ ID NO: 30 :
US-09-799-777-30
Query Match 87.0%; Score 240; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 9.2e-227;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 37 SRLEWKKLGRSVSFVYQOITLQDGFKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEQ 96
Db 59 SRLEWKKLGRSVSFVYQOITLQDGFKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEQ 118
Qy 97 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTFWFKDGIRLLEN 156
Db 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTFWFKDGIRLLEN 178
Qy 157 PRLGSQSTNSSTYTNMTKTGTLQFNTVSKLDTGEYSCEARNVGVYRRCPCGKRMQVDDNLIS 216
Db 179 PRLGSQSTNSSTYTNMTKTGTLQFNTVSKLDTGEYSCEARNVGVYRRCPCGKRMQVDDNLIS 238
Qy 217 GIIAAVVVVALVISVCGLGVCYAKRGYFSKETSFKQSNSSSKATTMSDNDFKHTKSFII 276
Db 239 GIIAAVVVVALVISVCGLGVCYAKRGYFSKETSFKQSNSSSKATTMSDNDFKHTKSFII 298

RESULT 6
US-10-139-849-2
; Sequence 2, Application US/10139849
; Publication No. US20030079238A1
; GENERAL INFORMATION:
; APPLICANT: Cunningham, Sonia
; Barrios, Maria Pia
; TITLE OF INVENTION: A POLYNUCLEOTIDE ENCODING A HUMAN
; JUNCTIONAL ADHESION PROTEIN (JAM 2)
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Rockett, Milnamow & Katz, Ltd.
; STREET: 180 N. Stetson Avenue, 2 Prudential Plaza,
; Suite 4700
; CITY: Chicago
; STATE: IL
; COUNTRY: U.S.A.
; ZIP: 60601
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/139,849
; FILING DATE: 07-May-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/643,929
; FILING DATE: 23-Aug-2000
; ATTORNEY/AGENT INFORMATION:
; NAME: Katz, Martin L.
; REGISTRATION NUMBER: 25,011
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312-616-5400
; TELEFAX: 312-616-5460
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:

LENGTH: 298 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-10-139-849-2
Query Match 87.0%; Score 240; DB 15; Length 298;
Best Local Similarity 100.0%; Pred. No. 9.2e-227;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 37 SRLEWKKLGRSVSFVYQOITLQDGFKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEQ 96
Db 59 SRLEWKKLGRSVSFVYQOITLQDGFKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEQ 118
Qy 97 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTFWFKDGIRLLEN 156
Db 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTFWFKDGIRLLEN 178
Qy 157 PRLGSQSTNSSTYTNMTKTGTLQFNTVSKLDTGEYSCEARNVGVYRRCPCGKRMQVDDNLIS 216
Db 179 PRLGSQSTNSSTYTNMTKTGTLQFNTVSKLDTGEYSCEARNVGVYRRCPCGKRMQVDDNLIS 238
Qy 217 GIIAAVVVVALVISVCGLGVCYAKRGYFSKETSFKQSNSSSKATTMSDNDFKHTKSFII 276
Db 239 GIIAAVVVVALVISVCGLGVCYAKRGYFSKETSFKQSNSSSKATTMSDNDFKHTKSFII 298

RESULT 7
US-10-192-791-2
; Sequence 2, Application US/10192791
; Publication No. US20030130166A1
; GENERAL INFORMATION:
; APPLICANT: Texas Biotechnology Corporation
; TITLE OF INVENTION: A Polynucleotide Encoding a Human Junctional Adhesion Protein (J
; FILE REFERENCE: TEX4542P0430
; CURRENT APPLICATION NUMBER: US/10/192,791
; CURRENT FILING DATE: 2003-12-10
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 2
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-192-791-2
Query Match 87.0%; Score 240; DB 16; Length 298;
Best Local Similarity 100.0%; Pred. No. 9.2e-227;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 37 SRLEWKKLGRSVSFVYQOITLQDGFKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEQ 96
Db 59 SRLEWKKLGRSVSFVYQOITLQDGFKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEQ 118
Qy 97 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTFWFKDGIRLLEN 156
Db 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTFWFKDGIRLLEN 178
Qy 157 PRLGSQSTNSSTYTNMTKTGTLQFNTVSKLDTGEYSCEARNVGVYRRCPCGKRMQVDDNLIS 216
Db 179 PRLGSQSTNSSTYTNMTKTGTLQFNTVSKLDTGEYSCEARNVGVYRRCPCGKRMQVDDNLIS 238
Qy 217 GIIAAVVVVALVISVCGLGVCYAKRGYFSKETSFKQSNSSSKATTMSDNDFKHTKSFII 276
Db 239 GIIAAVVVVALVISVCGLGVCYAKRGYFSKETSFKQSNSSSKATTMSDNDFKHTKSFII 298

RESULT 8
US-09-909-320-64
; Sequence 64, Application US/09909320
; Patent No. US20020132240A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.

```
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/909,320
; CURRENT FILING DATE: 2002-01-04
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-909-320-64

Query Match      83.3%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 6.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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QY 37 SRLEWKKLGRSVSVFYVYOOTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCVSPSEOG 96
Db 59 SRLEWKKLGRSVSVFYVYOOTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCVSPSEOG 118
QY 97 QNLEEDTTLVLVAPVPSCVPSALSGLTGTGTFVTVSKLDTGEYSCAARNVGYRRCPOKRGHVDLNLIS 216
Db 119 QNLEEDTTLVLVAPVPSCVPSALSGLTGTGTFVTVSKLDTGEYSCAARNVGYRRCPOKRGHVDLNLIS 178
QY 157 PRLGSQSTNSSYTMNTKTGTGTFVTVSKLDTGEYSCAARNVGYRRCPOKRGHVDLNLIS 216
Db 179 PRLGSQSTNSSYTMNTKTGTGTFVTVSKLDTGEYSCAARNVGYRRCPOKRGHVDLNLIS 238
QY 217 GIIRAAVVVVVALVISVCGLGVCYVQORGYFSKETSFKQNSSSSKATTMSN 266
Db 239 GIIRAAVVVVVALVISVCGLGVCYVQORGYFSKETSFKQNSSSSKATTMSN 288

RESULT 9
US-09-909-088B-64
; Sequence 64, Application US/09909088B
; Patent No. US20020146709A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/909,088B
; CURRENT FILING DATE: 2001-07-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
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; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-909-088B-64

Query Match      83.3%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 6.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 37 SRLEWKKLGRSVFVYQOTLQGDPKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 96
Db 59 SRLEWKKLGRSVFVYQOTLQGDPKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118

Qy 97 QNLEEDTTLVLVAVAPVSCPSSALSGTTVELRCQDKEGNPAPEYTFKDGIRLLEN 156
Db 119 QNLEEDTTLVLVAVAPVSCPSSALSGTTVELRCQDKEGNPAPEYTFKDGIRLLEN 178

Qy 157 PRLGQSSTNSSTYTNKTKGTQFNVTSKLDTGEYSCEARNVGVYRRCCKRMQVDDLNIS 216
Db 179 PRLGQSSTNSSTYTNKTKGTQFNVTSKLDTGEYSCEARNVGVYRRCCKRMQVDDLNIS 238

Qy 217 GIIAAVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSEN 266
Db 239 GIIAAVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSEN 288

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RESULT 10

US-09-905-291A-64
 ; Sequence 64, Application US/09905291A
 ; Patent No. US20020160374A1

GENERAL INFORMATION:

; APPLICANT: Genentech, Inc.
 ; APPLICANT: Ashkenazi, Avi
 ; APPLICANT: Botstein, David
 ; APPLICANT: Desnovers, Luc
 ; APPLICANT: Eaton, Dan L.
 ; APPLICANT: Ferrara, Napoleone
 ; APPLICANT: Filvaroff, Ellen
 ; APPLICANT: Fong, Sherman
 ; APPLICANT: Gao, Wei-Qiang
 ; APPLICANT: Gerber, Hanspeter
 ; APPLICANT: Gerritsen, Mary E.
 ; APPLICANT: Goddard, A.
 ; APPLICANT: Godowski, Paul J.
 ; APPLICANT: Grimaldi, Christopher J.
 ; APPLICANT: Gurney, Austin L.
 ; APPLICANT: Hillan, Kenneth, J.
 ; APPLICANT: Kijavlin, Ivar J.
 ; APPLICANT: Mather, Jennie P.
 ; APPLICANT: Pan, James
 ; APPLICANT: Paoni, Nicholas F.
 ; APPLICANT: Roy, Margaret Ann
 ; APPLICANT: Stewart, Timothy A.
 ; APPLICANT: Tumas, Daniel
 ; APPLICANT: Williams, P. Mickey
 ; APPLICANT: Wood, William, I.

; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic

; TITLE OF INVENTION: Acids Encoding the Same
 ; FILE REFERENCE: 10466-14
 ; CURRENT APPLICATION NUMBER: US/09/905,291A
 ; CURRENT FILING DATE: 2001-07-12
 ; PRIOR APPLICATION NUMBER: PCT/US00/04414
 ; PRIOR FILING DATE: 2000-02-22
 ; PRIOR APPLICATION NUMBER: US 60/143,048
 ; PRIOR FILING DATE: 1999-07-07
 ; PRIOR APPLICATION NUMBER: US 60/145,698
 ; PRIOR FILING DATE: 1999-07-26
 ; PRIOR APPLICATION NUMBER: US 60/146,222
 ; PRIOR FILING DATE: 1999-07-28
 ; PRIOR APPLICATION NUMBER: PCT/US99/20594
 ; PRIOR FILING DATE: 1999-09-08
 ; PRIOR APPLICATION NUMBER: PCT/US99/20944
 ; PRIOR FILING DATE: 1999-09-13
 ; PRIOR APPLICATION NUMBER: PCT/US99/21090
 ; PRIOR FILING DATE: 1999-09-15
 ; PRIOR APPLICATION NUMBER: PCT/US99/21547
 ; PRIOR FILING DATE: 1999-09-15
 ; PRIOR APPLICATION NUMBER: PCT/US99/23089
 ; PRIOR FILING DATE: 1999-10-05
 ; PRIOR APPLICATION NUMBER: PCT/US99/28214
 ; PRIOR FILING DATE: 1999-11-29
 ; PRIOR APPLICATION NUMBER: PCT/US99/28313
 ; PRIOR FILING DATE: 1999-11-30
 ; PRIOR APPLICATION NUMBER: PCT/US99/28564
 ; PRIOR FILING DATE: 1999-12-02
 ; PRIOR APPLICATION NUMBER: PCT/US99/28565
 ; PRIOR FILING DATE: 1999-12-02
 ; PRIOR APPLICATION NUMBER: PCT/US99/30095
 ; PRIOR FILING DATE: 1999-12-16
 ; PRIOR APPLICATION NUMBER: PCT/US99/30911
 ; PRIOR FILING DATE: 1999-12-20
 ; PRIOR APPLICATION NUMBER: PCT/US99/30999
 ; PRIOR FILING DATE: 1999-12-20
 ; PRIOR APPLICATION NUMBER: PCT/US00/00219
 ; PRIOR FILING DATE: 2000-01-05
 ; NUMBER OF SEQ ID NOS: 423
 ; SEQ ID NO 64
 ; LENGTH: 312
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-09-905-291A-64

Query Match

Best Local Similarity 100.0%; Pred. No. 6.1e-217;

Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy 37 SRLEWKKLGRSVFVYQOTLQGDPKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 96
Db 59 SRLEWKKLGRSVFVYQOTLQGDPKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118

Qy 97 QNLEEDTTLVLVAVAPVSCPSSALSGTTVELRCQDKEGNPAPEYTFKDGIRLLEN 156
Db 119 QNLEEDTTLVLVAVAPVSCPSSALSGTTVELRCQDKEGNPAPEYTFKDGIRLLEN 178

Qy 157 PRLGQSSTNSSTYTNKTKGTQFNVTSKLDTGEYSCEARNVGVYRRCCKRMQVDDLNIS 216
Db 179 PRLGQSSTNSSTYTNKTKGTQFNVTSKLDTGEYSCEARNVGVYRRCCKRMQVDDLNIS 238

Qy 217 GIIAAVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSEN 266
Db 239 GIIAAVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSEN 288

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RESULT 11

US-09-953-499-9
 ; Sequence 9, Application US/09953499
 ; Publication No. US20020182206A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Genentech, Inc.
 ; APPLICANT: Ashkenazi, Avi J.

RESULT 13
US-09-907-824-64
; Sequence 64, Application US/09907824
; Publication No. US20020197671A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/907,824
; PRIOR FILING DATE: 2001-07-17
; PRIOR APPLICATION NUMBER: 09/665,350
; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64

; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-907-824-64
Query Match 83.3%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 6.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 37 SRLEWKKLGRSVSFYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCVSPSEOG 96
Db |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
59 SRLEWKKLGRSVSFYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCVSPSEOG 118
QY 97 ONLEBDTTLVLVAPVPSCVPSSALSGTWELRCQKGNPAPEYTFWKDGIRLLN 156
Db |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
119 ONLEBDTTLVLVAPVPSCVPSSALSGTWELRCQKGNPAPEYTFWKDGIRLLN 178
QY 157 PRLGSQSTNSSYTMNTKTGTLOFNTVSKLDTGCEYSCARNVGYRRCCKRMQVDDLNIS 216
Db |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
179 PRLGSQSTNSSYTMNTKTGTLOFNTVSKLDTGCEYSCARNVGYRRCCKRMQVDDLNIS 238
QY 217 GIIAAVVVVALVISVCGLGVCYAQRKGYSFKTSETSFQKSNSSSKATTMSN 266
Db |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
239 GIIAAVVVVALVISVCGLGVCYAQRKGYSFKTSETSFQKSNSSSKATTMSN 288
RESULT 14
US-09-907-841-64
; Sequence 64, Application US/09907841
; Publication No. US20020198366A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/907,841
; PRIOR FILING DATE: 2001-11-20
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13

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; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-907-841-64

Query Match      83.3%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 6.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 37 SRLEWKKLGRSVSFVYQQTLQGDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
Db 59 SRLEWKKLGRSVSFVYQQTLQGDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

Qy 97 QNLEEDVTTLVLVAVAPVSCVPSALSGTVVELRCQDKEGNAPEYTFKDGIRLLEN 156
Db 119 QNLEEDVTTLVLVAVAPVSCVPSALSGTVVELRCQDKEGNAPEYTFKDGIRLLEN 178

Qy 157 PRGQSQTNSSTYMTNTKTGLQNTVSKLDTGEYSCEARNVGYRRCGKRMQVDDNLNIS 216
Db 179 PRGQSQTNSSTYMTNTKTGLQNTVSKLDTGEYSCEARNVGYRRCGKRMQVDDNLNIS 238

Qy 217 GIITAAVVVALVISVCGLVGYCAQRKGYSFKTSFKQSNSSSKATTMSN 266
Db 239 GIITAAVVVALVISVCGLVGYCAQRKGYSFKTSFKQSNSSSKATTMSN 288
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RESULT 15

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US-09-904-011-64
; Sequence 64, Application US/09904011
; Publication No. US20030003530A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/904,011
; CURRENT FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: 09/665,350
```

```
; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-904-011-64

Query Match      83.3%; Score 230; DB 11; Length 312;
Best Local Similarity 100.0%; Pred. No. 6.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 37 SRLEWKKLGRSVSFVYQQTLQGDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
Db 59 SRLEWKKLGRSVSFVYQQTLQGDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

Qy 97 QNLEEDVTTLVLVAVAPVSCVPSALSGTVVELRCQDKEGNAPEYTFKDGIRLLEN 156
Db 119 QNLEEDVTTLVLVAVAPVSCVPSALSGTVVELRCQDKEGNAPEYTFKDGIRLLEN 178

Qy 157 PRGQSQTNSSTYMTNTKTGLQNTVSKLDTGEYSCEARNVGYRRCGKRMQVDDNLNIS 216
Db 179 PRGQSQTNSSTYMTNTKTGLQNTVSKLDTGEYSCEARNVGYRRCGKRMQVDDNLNIS 238

Qy 217 GIITAAVVVALVISVCGLVGYCAQRKGYSFKTSFKQSNSSSKATTMSN 266
Db 239 GIITAAVVVALVISVCGLVGYCAQRKGYSFKTSFKQSNSSSKATTMSN 288
```

Search completed: December 9, 2003, 17:47:10
Job time : 34.1777 sec

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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:33:14 ; Search time 13.4634 Seconds
(without alignments)
1971.458 Million cell updates/sec

Title: US-09-852-797-76_COPY_23_298
Perfect score: 276
Sequence: 1 YHKAYGFSAPKQQVVAVX.....SSKATTMSDNDFKTKSFII 276

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 283308 seqs, 96168682 residues

Word size : 30

Total number of hits satisfying chosen parameters: 0

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : PIR_76:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description

No matches found

Search completed: December 9, 2003, 17:38:32
Job time : 14.4634 secs

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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:26:43 ; Search time 9.61672 Seconds
(without alignments)
1349.666 Million cell updates/sec

Title: US-09-852-797-76_COPY_23_298

Perfect score: 276

Sequence: 1 YHKAYGFSAPKQDVAVX.....SSKATTWSEDFKHTKSFII 276

Scoring table:

Gapop 60.0 , Gapext 60.0

Searched: 127863 seqs, 47026705 residues

Word size : 30

Total number of hits satisfying chosen parameters: 1

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : SwissProt_41:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	240	87.0	298	1 JAM2_HUMAN	P57087 homo sapien

ALIGNMENTS

RESULT 1
JAM2_HUMAN
ID JAM2_HUMAN STANDARD; PRT; 298 AA.
AC P57087;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Junctional adhesion molecule 2 precursor (Vascular endothelial
DE Junction-associated molecule) (VE-JAM).
GN JAM2 OR VEJAM OR C21ORF43.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP
RP SEQUENCE FROM N.A.
RC TISSUE=Vascular endothelial cells;
RX MEDLINE=20317114; PubMed=10779521;
RA Palmeri D., van Zante A., Huang C.C., Hemmerich S., Rosen S.D.;
RT "Vascular endothelial junction-associated molecule, a novel member of
RT the immunoglobulin superfamily, is localized to intercellular
RL boundaries of endothelial cells."
RL J. Biol. Chem. 275:19139-19145(2000).
RN [2]
RP
RP SEQUENCE FROM N.A.
RC TISSUE=Placenta;
RX MEDLINE=20507930; PubMed=10945976;

RA Cunningham S.A., Arrate M.P., Rodriguez J.M., Bjerkce R.J.,
RA Vanderslice P., Morris A.P., Brock T.A.;
RT "A novel protein with homology to the functional adhesion molecule:
RT Characterization of leukocyte interactions";
RL J. Biol. Chem. 275:34750-34756(2000).
RN [3]
RP
RP SEQUENCE FROM N.A.
RC
RC TISSUE=Lung;
RX MEDLINE=22386257; PubMed=12477932;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Udell T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smalilus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length
RT human and mouse cDNA sequences";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
CC
CC -!- FUNCTION: MAY PLAY A ROLE IN THE PROCESSES OF LYMPHOCTE HOMING TO
CC SECONDARY LYMPHOID ORGANS.
CC
CC -!- SUBCELLULAR LOCATION: Type I membrane protein (Potential).
CC -!- TISSUE SPECIFICITY: PROMINENTLY EXPRESSED ON HIGH ENDOTHELIAL
CC VENULES BUT IS ALSO PRESENT ON THE ENDOTHELIA OF OTHER VESSELS.
CC LOCALIZED TO THE INTERCELLULAR BOUNDARIES OF HIGH ENDOTHELIAL
CC CELLS.
CC
CC -!- SIMILARITY: BELONGS TO THE IMMUNOGLOBULIN SUPERFAMILY.
CC -!- SIMILARITY: Contains 1 immunoglobulin-like V-type domain.
CC -!- SIMILARITY: Contains 1 immunoglobulin-like C2-type domain.
CC
CC -!- DATABASE: NAME=PROV; NOTE=PROV 2:1-3(2001);
CC WWW="http://www.ncbi.nlm.nih.gov/prov/guide/1652492186.g.htm".
CC
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC
CC EMBL; AF255910; AAF61223.1; -;
DR EMBL; AY016009; AAG49022.1; -;
DR EMBL; BC017779; AAH17779.1; -;
DR Genew; HGNC:14686; JAM2.
DR MIM; 606870; -;
DR GO; GO:0005887; C:integral to plasma membrane; NAS.
DR GO; GO:0016337; P:cell-cell adhesion; NAS.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003598; Ig_c2.
DR InterPro; IPR003006; Ig_MHC.
DR Pfam; PF00047; Ig; 2.
DR SMART; SM00408; Igc2; 1.
DR PROSITE; PS50835; IG-LIKE; 2.
DR Immunoglobulin domain; Glycoprotein; Transmembrane; Signal.
KW SIGNAL 1 20
FT CHAIN 21 298 JUNCTIONAL ADHESION MOLECULE 2.
FT DOMAIN 21 238 EXTRACELLULAR (POTENTIAL).
FT TRANSMEM 239 259 POTENTIAL.
FT DOMAIN 260 298 CYTOPLASMIC (POTENTIAL).
FT DOMAIN 32 127 IG-LIKE V-TYPE.
FT DOMAIN 134 238 IG-LIKE C2-TYPE.
FT DISULFID 50 109 POTENTIAL.
FT DISULFID 155 214 POTENTIAL.

```
FT CARBOHYD 98 98 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 187 187 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 236 236 N-LINKED (GLCNAC. . .) (POTENTIAL).
SQ SEQUENCE 298 AA; 33207 MW; CA78B518E22DCAEE CRC64;

Query Match      87.0%; Score 240; DB 1; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.6e-232;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 37 SRLEWKLGSRVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
Db 59 SRLEWKLGSRVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
QY 97 QNLEEDTVTLVLVAPVPSCVPSSALSGTVVELRCQDKEGNPAPEYTFWFKDGIRLLEN 156
Db 119 QNLEEDTVTLVLVAPVPSCVPSSALSGTVVELRCQDKEGNPAPEYTFWFKDGIRLLEN 178
QY 157 PRLGQSSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNIS 216
Db 179 PRLGQSSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNIS 238
QY 217 GIIAAVVVVALVISVGLGVCYQAQRKGYPFSKETSFQKSNSSSKATTMSSENDPKHTKSFII 276
Db 239 GIIAAVVVVALVISVGLGVCYQAQRKGYPFSKETSFQKSNSSSKATTMSSENDPKHTKSFII 298
```

Search completed: December 9, 2003, 17:36:26
Job time : 9.61672 secs

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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:32:33 ; Search time 35.101 Seconds
(without alignments)
2029.071 Million cell updates/sec

Title: US-09-852-797-76_COPY_23_298
Perfect score: 276
Sequence: 1 YKAYGFSAPKQQQVTVAVX.....SSKATTMSSEDFKHTKSFII 276

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 830525 seqs, 258052604 residues

Word size: 30

Total number of hits satisfying chosen parameters: 0

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Listing first 45 summaries

- Database : SPTREMBL_23.*
- 1: sp_archaea.*
 - 2: sp_bacteria.*
 - 3: sp_fungi.*
 - 4: sp_human.*
 - 5: sp_invertebrate.*
 - 6: sp_mammal.*
 - 7: sp_mhc.*
 - 8: sp_organelle.*
 - 9: sp_phage.*
 - 10: sp_plant.*
 - 11: sp_rodent.*
 - 12: sp_virus.*
 - 13: sp_vertebrate.*
 - 14: sp_unclassified.*
 - 15: sp_xvirus.*
 - 16: sp_bacteriap.*
 - 17: sp_archaeap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Query Match	Score	Length	DB ID	Description

No matches found

Search completed: December 9, 2003, 17:38:06
Job time : 35.101 secs

PR 30-MAY-1997; 97US-0048189.
 PR 30-MAY-1997; 97US-0048357.
 PR 30-MAY-1997; 97US-0050934.
 PR 06-JUN-1997; 97US-0048970.
 PR 05-SEP-1997; 97US-0057765.
 XX (HUMA-) HUMAN GENOME SCI INC.
 XX
 XX Ferrie AM, Fischer CL, Gentz RL, Greene JM, Kyaw H;
 PI Li H, Li Y, Moore PA, Rosen CA, Ruben SM, Soppet DR;
 PI Wei YF, Young PE, Zeng Z;
 XX WPI; 1998-520811/44.
 DR N-PSDB; AAV34310.
 XX
 XX Isolated human poly.nucleotide(s) encoding secretory peptide(s) -
 PT used to develop products for the diagnosis and treatment of e.g.
 PT inflammation, cancers, CNS disorders or immune system disorders
 XX
 XX Claim 1; Page 168-169; 201pp; English.
 PS
 CC This sequence represents a secreted human protein encoded by the gene
 CC clone detailed in the descriptor line. The gene can be used to generate
 CC fusion proteins by linking to the gene to a human immunoglobulin Fc
 CC portion (e.g. AAV34277) for increasing the stability of the fused
 CC protein as compared to the human protein only.
 CC The invention relates to 28 novel genes and their fragments (nucleic
 CC acid sequences: AAV34286-V34325; amino acid sequences AAW75196-W75235)
 CC which are useful for preventing, treating or ameliorating medical
 CC conditions e.g. by protein or gene therapy. Also, pathological
 CC conditions can be diagnosed by determining the amount of the new
 CC polypeptides in a sample or by determining the presence of mutations in
 CC the new polynucleotides. Specific uses are described for each of the 28
 CC polynucleotides, based on which tissues they are most highly expressed in
 CC (see AAV34286 for described uses).
 XX
 XX SQ Sequence 298 AA;
 Query Match 99.3%; Score 274; DB 19; Length 298;
 Best Local Similarity 100.0%; Pred. No. 1.2e-260; Gaps 0;
 Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 YKAYGFSAPKQDQVAVYQEAAILACKTPKTVXSRLEWKKLGRSVFVYQQTIGQD 60
 Db 23 YKAYGFSAPKQDQVAVYQEAAILACKTPKTVXSRLEWKKLGRSVFVYQQTIGQD 82
 Qy 61 FKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSQGNLEEDTTLVLVAPVPSCEVP 120
 Db 83 FKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSQGNLEEDTTLVLVAPVPSCEVP 142
 Qy 121 SSALSGTVVELRCODKEGNPAPEYTWFKDGIRLLENPRLGQSQTNSSTYTNKTKGTLOFN 180
 Db 143 SSALSGTVVELRCODKEGNPAPEYTWFKDGIRLLENPRLGQSQTNSSTYTNKTKGTLOFN 202
 Qy 181 TVSKLDTGEYSCEARNVGYRCRCKRMQVDDNLNIGIIAAVVVALVISVCGLGVCYQA 240
 Db 203 TVSKLDTGEYSCEARNVGYRCRCKRMQVDDNLNIGIIAAVVVALVISVCGLGVCYQA 262
 Qy 241 RKGYSFKTSFKNSSSKATTSNDPKTKSFII 276
 Db 263 RKGYSFKTSFKNSSSKATTSNDPKTKSFII 298
 RESULT 2
 AAE26983
 ID AAE26983 standard; Protein; 298 AA.
 XX
 AC AAE26983;
 XX
 DT 13-DEC-2002 (first entry)
 XX
 DE Human gene 25 encoded secreted protein HTEEB42, SEQ ID NO:76.
 XX

KW Human; immunodeficiency; X-linked agammaglobulinaemia; septic shock;
 KW autoimmune disorder; rheumatoid arthritis; multiple sclerosis; cancer;
 KW Grave's disease; diabetes mellitus; haematopoietic disorder; stroke;
 KW respiratory disorder; asthma; allergy; gastrointestinal disorder;
 KW inflammatory bowel disease; neurodegenerative disorder; hepatitis;
 KW Parkinson's disease; Alzheimer's disease; cardiovascular disorder;
 KW atherosclerosis; myocarditis; renal disorder; fungicide; virucide;
 KW hyperproliferative disorder; acute glomerulonephritis; conjunctivitis;
 KW respiratory disorder; rhinitis; sinusitis; neurological disease;
 KW endocrine disorder; Addison's disease; reproductive system disorder;
 KW endometriosis; vasotropic; vulvovaginitis; cytostatic; cardiant;
 KW anti-HIV; tranquilliser; gout; antiparasitic.
 XX
 OS Homo sapiens.
 XX
 XX Key Location/Qualifiers
 FH Peptide 1..22
 FT /label= Signal_peptide
 FT Protein 23..298
 FT /note= "Human mature secreted protein"
 FT Misc-difference 42
 FT /label= Unknown
 FT /note= "Encoded by GWG"
 FT Misc-difference 58
 FT /label= Unknown
 FT /note= "Encoded by TSC"
 XX
 XX US2002077287-A1.
 PN 20-JUN-2002.
 XX
 XX 11-MAY-2001; 2001US-0852659.
 XX
 XX 11-SEP-1998; 98US-0152060.
 XX
 XX (RUBE/) RUBEN S M.
 PA (ROSE/) ROSEN C A.
 PA (LIYU/) LI Y.
 PA (ZENG/) ZENG Z.
 PA (KYAW/) KYAW H.
 PA (FISC/) FISCHER C L.
 PA (LIHH/) LI H.
 PA (SOPP/) SOPPET D R.
 PA (GENT/) GENTZ R L.
 PA (WEIY/) WEI Y.
 XX
 XX Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
 PI Soppet DR, Gentz RL, Wei Y, Moore PA, Young PE, Greene JM;
 PI Ferrie AM;
 XX
 XX WPI; 2002-598780/64.
 DR N-PSDB; AAD44660.
 XX
 XX Novel human secreted polypeptides and polynucleotides for diagnosing,
 PT preventing, treating immune hyperproliferative, cardiovascular, of
 PT neurological, reproductive disorders and identifying modulators of
 PT therapeutic use
 XX
 PS Claim 11; Page 186; 209pp; English.
 XX
 CC AAD44636-AAD44676 represent cDNAs corresponding to 28 human secreted
 CC protein genes, and AAE26959-AAE26999 represent the proteins they encode.
 CC AAE27000-AAE27025 represent human secreted protein fragments or their
 CC variants. The secreted proteins and genes are useful for preventing,
 CC treating or ameliorating medical conditions, e.g., by protein or gene
 CC therapy. Specific uses are described for each of the 28 genes, based
 CC on the tissues in which they are most highly expressed and include
 CC developing products for the diagnosis or treatment of immunodeficiencies,
 CC e.g., X-linked agammaglobulinaemia, B cell immunodeficiencies, severe
 CC combined immunodeficiencies, autoimmune disorders e.g., systemic lupus
 CC erythematosus, rheumatoid arthritis, multiple sclerosis, autoimmune
 CC thyroiditis, autoimmune haemolytic anaemia, Goodpasture's syndrome,
 CC Grave's disease, diabetes mellitus, dermatitis, inflammatory conditions

QY 61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSPSEGOQNLEEDTTLVLVAPAVPSCVCP 120
 DB 83 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSPSEGOQNLEEDTTLVLVAPAVPSCVCP 142
 QY 121 SSALSGTIVVELRCQDKEGNPAPEYTWFKDGIIRLLENPRLGSTNSSTYMTKTGTLOFN 180
 DB 143 SSALSGTIVVELRCQDKEGNPAPEYTWFKDGIIRLLENPRLGSTNSSTYMTKTGTLOFN 202
 QY 181 TVSKLDTGEYSCEARNVGYRRCPCGRMQVDDNLISGIIIAAVVVVALVISVCGLGVCYCAQ 240
 DB 203 TVSKLDTGEYSCEARNVGYRRCPCGRMQVDDNLISGIIIAAVVVVALVISVCGLGVCYCAQ 262
 QY 241 RKGYSKTSFQKNSSSSKATMTSENDFKHTKSFI 276
 DB 263 RKGYSKTSFQKNSSSSKATMTSENDFKHTKSFI 298

RESULT 4

ABR47926
 ID ABR47926 standard; Protein; 298 AA.

XX ABR47926;

DT 12-JUN-2003 (first entry)

XX Human secreted protein, SEQ ID 817.

XX Cardiant; antiarrhythmic; antiarteriosclerotic; vasotropic; cytostatic;
 KW vulnery; antiinflammatory; nootropic; neuroprotective;
 KW antiparkinsonian; gene therapy; human; cardiovascular disorder.

XX Homo sapiens.

XX WO200295010-A2.

XX 28-NOV-2002.

XX 19-MAR-2002; 2002WO-US09785.

XX 21-MAR-2001; 2001US-277340P.

XX 19-JUL-2001; 2001US-306171P.

XX 13-NOV-2001; 2001US-331287P.

XX (HUMA-) HUMAN GENOME SCI INC.

XX Rosen CA, Ruben SM;

XX WPI; 2003-129429/12.

XX Novel human secreted proteins, useful for detecting, preventing,
 PT diagnosing, prognosticating, treating and/or ameliorating
 PT cardiovascular disorders such as arrhythmia -

PS Claim 13; SEQ ID 817; 1881pp; English.

XX The present invention relates to novel human secreted proteins
 CC (ABR47633-ABR48145) and their coding sequences (ACC50344-ACC50856). The
 CC proteins and their coding sequences are useful for the preparation of a
 CC diagnostic or pharmaceutical composition for diagnosing or treating a
 CC cardiovascular disorder (e.g., arrhythmia, tachycardia, cardiac arrest,
 CC coronary arteriosclerosis and myocardial ischaemia), neural disorders,
 CC immune system disorders, muscular disorders, reproductive disorders,
 CC gastrointestinal disorders, pulmonary disorders, renal disorders,
 CC proliferative disorders and/or cancerous diseases and conditions, for
 CC wound healing and epithelial cell proliferation, to treat inflammation or
 CC infection, for treating thrombosis and arteriosclerosis, for treating or
 CC preventing neural damage which occurs in neuronal disorders or
 CC neurodegenerative conditions such as Alzheimer's disease and Parkinson's
 CC disease, to enhance bone and periodontal regeneration and aid in tissue
 CC transplants or bone grafts, to prevent skin aging or hair loss, to
 CC stimulate growth and differentiation of haematopoietic cells and bone
 CC marrow cells when used in combination with other cytokines, to maintain

CC organs before transplantation or for supporting cell culture of primary
 CC tissues, to increase or decrease differentiation or proliferation of
 CC embryonic stem cells, or to modulate mammalian characteristics or
 CC metabolism.

CC Note: The sequence data for this patent was published in electronic
 CC format and is available from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences.

XX Sequence 298 AA;

Query Match 99.3%; Score 274; DB 24; Length 298;

Best Local Similarity 100.0%; Pred. No. 1.2e-260;

Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YHKAYGFSAPKDDQVVTAVYQEAAILACKTPKTVXSRLEWKLGSRVSFVYYQOTLQGD 60

DB 23 YHKAYGFSAPKDDQVVTAVYQEAAILACKTPKTVXSRLEWKLGSRVSFVYYQOTLQGD 82

QY 61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSPSEGOQNLEEDTTLVLVAPAVPSCVCP 120

DB 83 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSPSEGOQNLEEDTTLVLVAPAVPSCVCP 142

QY 121 SSALSGTIVVELRCQDKEGNPAPEYTWFKDGIIRLLENPRLGSTNSSTYMTKTGTLOFN 180

DB 143 SSALSGTIVVELRCQDKEGNPAPEYTWFKDGIIRLLENPRLGSTNSSTYMTKTGTLOFN 202

QY 181 TVSKLDTGEYSCEARNVGYRRCPCGRMQVDDNLISGIIIAAVVVVALVISVCGLGVCYCAQ 240

DB 203 TVSKLDTGEYSCEARNVGYRRCPCGRMQVDDNLISGIIIAAVVVVALVISVCGLGVCYCAQ 262

QY 241 RKGYSKTSFQKNSSSSKATMTSENDFKHTKSFI 276

DB 263 RKGYSKTSFQKNSSSSKATMTSENDFKHTKSFI 298

RESULT 5

ABU64994

ID ABU64994 standard; Protein; 298 AA.

XX AC ABU64994;

XX 15-MAY-2003 (first entry)

XX Human secreted protein gene 25, protein.

XX Secreted protein; immunodeficiency; multiple sclerosis;

KW severe combined immunodeficiency; autoimmune disorder; cancer;

KW rheumatoid arthritis; diabetes mellitus; haematopoietic disorder;

KW inflammatory condition; septic shock; inflammatory bowel disease;

KW Crohn's disease; respiratory disorder; asthma; allergy; stroke;

KW gastrointestinal disorder; central nervous system disorder;

KW ischaemic brain injury; neurodegenerative disorder; Parkinson's disease;

KW Alzheimer's disease; cardiovascular disorder; atherosclerosis;

KW blood-related disorder; thrombosis; atherosclerosis; renal disorder;

KW hyperproliferative disorder; acute glomerulonephritis; Addison's disease;

KW endocrine disorder; liver disease; reproductive system disorder;

KW endometriosis; infectious disease; pancreatic disorder; vaccine;

KW wound repair; angioneuroma; lymphatic disorder; hair loss; body weight;

KW body height; hair colour; human.

XX Homo sapiens.

XX US2002172994-A1.

XX 21-NOV-2002.

XX 11-MAY-2001; 2001US-0852797.

XX 14-MAR-1997; 97US-040710P.

XX 14-MAR-1997; 97US-040762P.

XX 30-MAY-1997; 97US-048100P.

XX 30-MAY-1997; 97US-048189P.

XX 30-MAY-1997; 97US-048357P.

PR 30-MAY-1997; 97US-050934P.
 PR 06-JUN-1997; 97US-048970P.
 PR 05-SEP-1997; 97US-057765P.
 PR 19-DEC-1997; 97US-068368P.
 PR 02-FEB-2001; 2001US-265583P.
 PR 12-MAR-1998; 98WO-US04858.
 PR 11-SEP-1998; 98US-0152060.
 XX (RUBE/) RUBEN S M.
 PA (ROSE/) ROSEN C A.
 PA (LIYU/) LI Y.
 PA (ZENG/) ZENG Z.
 PA (KYAW/) KYAW H.
 PA (FISCHER/) FISCHER C L.
 PA (LIH/) LI H.
 PA (SOPPE/) SOPPE D R.
 PA (GENTZ R L).
 PA (WEIY/) WEI Y.
 PA (MOOR/) MOORE P A.
 PA (YOUNG/) YOUNG P E.
 PA (GREENE/) GREENE J M.
 PA (FERRIE/) FERRIE A M.
 XX Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
 PI Soppet DR, Gentz RL, Wei Y, Moore PA, Young PE, Greene JM;
 PI Ferrie AM;
 XX WPI: 2003-310989/30.
 DR N-PSDB; ABX96990.
 XX
 XX New human secreted polypeptides and polynucleotides for diagnosing,
 PT prognosing, preventing and treating immune, hyperproliferative, liver,
 PT kidney, reproductive disorders and for identifying modulators of
 PT therapeutic use -
 XX
 PS Claim 11; Page 186; 209pp; English.
 XX
 XX The invention relates to an isolated polypeptide comprising an amino acid
 CC sequence at least 95% identical to sequence of 28 human secreted
 CC proteins, their fragment, polypeptide domain, epitope, secreted form,
 CC variant, allelic variant, or species homologue, or the encoded sequence
 CC included in ATCC 97921 and 97922. Also included are the encoding
 CC nucleic acids, recombinant vectors, host cells, antibodies, and genes.
 CC The proteins and nucleic acids are useful for diagnosing, preventing,
 CC treating, prognosing or ameliorating a medical condition e.g.
 CC immunodeficiencies (e.g. X-linked agammaglobulinemia, B cell
 CC immunodeficiencies, severe combined immunodeficiencies), autoimmune
 CC disorders (e.g. systemic erythematous, rheumatoid arthritis, multiple
 CC sclerosis, autoimmune thyroiditis, autoimmune haemolytic anaemia,
 CC Goodpasture's syndrome, Grave's disease, diabetes mellitus, dermatitis),
 CC haematopoietic disorders, inflammatory conditions (e.g. septic shock,
 CC sepsis, reperfusion injury, inflammatory bowel disease, Crohn's disease),
 CC respiratory disorders (e.g. asthma and allergy), gastrointestinal
 CC disorders, cancers (e.g. gastric, ovarian, lung, bladder, liver and
 CC breast), central nervous system (CNS) disorders (e.g. ischaemic brain
 CC injury and/or stroke, traumatic brain injury), neurodegenerative
 CC disorders (e.g. Parkinson's disease and Alzheimer's disease, AIDS-related
 CC dementia, and prion disease), cardiovascular disorders (e.g.
 CC atherosclerosis, myocarditis, cardiovascular disease, and cardiopulmonary
 CC bypass complications), inflammation (e.g. hepatitis, gout, trauma,
 CC pancreatitis, sarcoidosis, dermatitis, allogenic transplant rejection),
 CC blood-related disorders (thrombosis, arterial thrombosis),
 CC hyperproliferative disorders, renal disorders (e.g. acute
 CC glomerulonephritis), endocrine disorders (e.g. Addison's disease,
 CC hyperthyroidism, hypoparathyroidism), liver diseases and disorders,
 CC reproductive system disorders (e.g. endometriosis), infectious diseases,
 CC and pancreatic disorders. Many other diseases and disorders are listed in
 CC the specification. They also useful as a vaccine adjuvant. Further they
 CC are useful to enhance or inhibit complement mediated cell lysis, for
 CC stimulating wound and tissue repair, angiogenesis, and the repair of
 CC vascular or lymphatic diseases or disorders. They are also useful
 CC to prevent hair loss, to modulate mammalian characteristics such as body
 CC height, weight, hair colour, and to increase or decrease storage

CC capabilities, fat content, lipid, protein, carbohydrate, vitamins,
 CC minerals, cofactors or other nutritional components. The proteins are
 CC also useful for identifying binding partners. The present sequence
 CC represents a secreted protein of the invention.
 XX
 SQ Sequence 298 AA;
 Query Match 99.3%; Score 274; DB 24; Length 298;
 Best Local Similarity 100.0%; Pred. No. 1.2e-260;
 Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 YHKAYGFSAPKDDQVTVAVYQAEAILACKTPKTVKSRLEWKLGSRVSFYVYQOTLQGD 60
 DB 23 YHKAYGFSAPKDDQVTVAVYQAEAILACKTPKTVKSRLEWKLGSRVSFYVYQOTLQGD 82
 QY 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSQGQNLBEDTTLVLEVPVAPVSCVVP 120
 DB 83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSQGQNLBEDTTLVLEVPVAPVSCVVP 142
 QY 121 SSALSGTVVLRCDQEGNPAPEYTWPKDGRILLENPRLGSSQSTNSSTYTNKTGTLOPN 180
 DB 143 SSALSGTVVLRCDQEGNPAPEYTWPKDGRILLENPRLGSSQSTNSSTYTNKTGTLOPN 202
 QY 181 TVSKLDTGEYSCEARNVGYRRCPGKRMQVDDNLNIGIIAAVWVVALVISVCGLGVCYQAQ 240
 DB 203 TVSKLDTGEYSCEARNVGYRRCPGKRMQVDDNLNIGIIAAVWVVALVISVCGLGVCYQAQ 262
 QY 241 RKGYSKETSFKQSNSSSKATTMSNDPKHTKSPFI 276
 DB 263 RKGYSKETSFKQSNSSSKATTMSNDPKHTKSPFI 298
 RESULT 6
 ABR00172
 ID ABR00172 standard; Protein; 298 AA.
 XX
 AC ABR00172;
 DT 03-APR-2003 (first entry)
 XX
 DE Human gene 162 encoded secreted protein HTEEB42, SEQ ID NO:461.
 XX
 KW Human; secreted protein; digestive disorder; gastrointestinal disorder;
 KW mouth; oesophagus; stomach; small intestine; large intestine; liver;
 KW biliary tract; pancreas; cancer; tumour; hyperproliferative disorder;
 KW immune disorder; inflammation; infection; wound healing; drug screening;
 KW chromosome identification; chromosome mapping; cytostatic; gene therapy;
 KW antiinflammatory; immunosuppressive; vulnery; chromosome 21q21.2.
 OS Homo sapiens.
 XX
 PN WO200276488-A1.
 XX
 PD 03-OCT-2002.
 XX
 PF 19-MAR-2002; 2002WO-US08276.
 XX
 PR 21-MAR-2001; 2001US-277340P.
 PR 19-JUL-2001; 2001US-306171P.
 PR 13-NOV-2001; 2001US-331287P.
 XX
 PA (HUMA-) HUMAN GENOME SCI INC.
 XX
 PI Rosen CA, Ruben SM;
 XX
 DR WPI; 2003-029900/02.
 DR N-PSDB; AB271351.
 XX
 PT New human secreted proteins and nucleic acids, useful for detecting,
 PT preventing, diagnosing, prognosticating, treating and/or ameliorating
 PT e.g. gastrointestinal diseases and disorders, or cancers -
 XX
 PS Claim 13; Page 1046-1047; 1216pp; English.

XX ABZ71190-ABZ71478 represent cDNAs corresponding to 178 human secreted
CC protein genes, and ABP00011-ABP00299 represent the proteins they encode.
CC ABZ71479-ABZ71540 represent human secreted protein genomic fragments. The
CC invention also encompasses antibodies specific for the secreted proteins,
CC the use of the secreted proteins in drug screening, and recombinant
CC vectors and host cells comprising a nucleic acid of the invention. The
CC secreted proteins, nucleic acids encoding them, antibodies or antibody
CC fragments specific for the secreted proteins, and modulators of protein
CC activity are useful for diagnosing, treating, ameliorating or preventing
CC digestive disorders. Such conditions include disorders of the mouth,
CC oesophagus, stomach, small intestine, large intestine, liver, biliary
CC tract and pancreas, and include cancers of these organs and tissues. The
CC secreted proteins and their nucleic acids may also be used in the
CC treatment of immune disorders, inflammation, infection,
CC hyperproliferative disorders, and to promote wound healing. Nucleic acids
CC of the invention may be used for chromosome identification, chromosome
CC mapping, in gene therapy, for identifying individuals from minute
CC biological samples, as hybridisation probes, and as molecular weight
CC markers. The present sequence represents a human secreted protein of the
CC invention.
XX SQ Sequence 298 AA;

Query Match 99.3%; Score 274; DB 24; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.2e-260;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 YHKVGFSAAPKQOVVAVKYQEAAILACKTPKTVXSRLEWKKLGRSVSVFYQOTLQGD 60
Db 23 YHKVGFSAAPKQOVVAVKYQEAAILACKTPKTVXSRLEWKKLGRSVSVFYQOTLQGD 82
QY 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGNLEEDTTLVLVAVAPVSCVCP 120
Db 83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGNLEEDTTLVLVAVAPVSCVCP 142
QY 121 SSALSGTVVELRCQEGNPAPETWFKDGIILLENPRLGSGSTSSYTMNTKTGTLPQN 180
Db 143 SSALSGTVVELRCQEGNPAPETWFKDGIILLENPRLGSGSTSSYTMNTKTGTLPQN 202
QY 181 TVSKLDTGYSCEARNVGYRCPGKRMQVDDLNISGIIAAVVALVSVGLGVCAVQAQ 240
Db 203 TVSKLDTGYSCEARNVGYRCPGKRMQVDDLNISGIIAAVVALVSVGLGVCAVQAQ 262
QY 241 RKGYFSKTSFQKSNSSSKATMSNDPKHTKSFII 276
Db 263 RKGYFSKTSFQKSNSSSKATMSNDPKHTKSFII 298

RESULT 7
AAW85457
ID AAW85457 standard; Protein; 298 AA.
XX AC AAW85457;
XX DT 25-FEB-1999 (first entry)
XX DE Secreted protein encoded by clone ct864_4.
XX KW Suppressed protein; nutritional activity; immune stimulating; vaccine;
KW suppressing activity; haematopoiesis regulating activity;
KW tissue growth activity; activin; inhibin activity; chemotactaxis;
KW chemokine activity; haemostasis; thrombolytic activity; receptor;
KW ligand; anti-inflammatory; cadherin; tumour invasion suppressor;
KW tumour inhibition; gene therapy.
XX OS Homo sapiens.
XX FN WO9842739-A2.
XX PD 01-OCT-1998.
XX PF 20-MAR-1998; 98WO-US05653.

XX 19-MAR-1998; 98US-0044466.
PR 21-MAR-1997; 97US-0822167.
XX (GEMY) GENETICS INST INC.
XX Agostino MJ, Jacobs K, Lavallie ER, McCoy JM, Merberg D;
PI Racie LA, Spaulding V, Treacy M;
XX WPI; 1998-609890/51.
DR N-PSDB; AAV82780.
XX New polynucleotides encoding secreted human proteins - derived from
PT human foetal brain, adult brain, foetal kidney, placenta or adult
PT pineal gland cDNA libraries.
XX Claim 17; Page 73-74; 113pp; English.
XX The present sequence represents a secreted protein. The polynucleotide
CC and secreted protein are predicted to have biological activities which
CC would make them suitable for treating, preventing or ameliorating medical
CC conditions in humans and animals, although no supporting data is given.
CC Suggested activities include nutritional activity, immune stimulating
CC (e.g. as vaccines) or suppressing activity, haematopoiesis regulating
CC activity, tissue growth activity, activin/inhibin activity,
CC chemotactic/chemokinetic activity, haemostatic and thrombolytic activity,
CC receptor/ligand activity, anti-inflammatory activity, cadherin/tumour
CC invasion suppressor activity, and tumour inhibition activity (no data is
CC given in the specification to support these activities). The
CC polynucleotide is also stated to be useful for gene therapy.
XX SQ Sequence 298 AA;

Query Match 87.0%; Score 240; DB 19; Length 298;
Best Local Similarity 100.0%; Pred. No. 3e-227;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 37 SRLEWKKLGRSVSVFYQOTLQGD FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOG 96
Db 59 SRLEWKKLGRSVSVFYQOTLQGD FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOG 118
QY 97 QNLEEDTTLVLVAVAPVSCVPSALSGTVVELRCQEGNPAPETWFKDGIILLEN 156
Db 119 QNLEEDTTLVLVAVAPVSCVPSALSGTVVELRCQEGNPAPETWFKDGIILLEN 178
QY 157 PRLGSQSTNSSTYTMNTKTGTLPQN TVSKLDTGYSCEARNVGYRCPGKRMQVDDLNIS 216
Db 179 PRLGSQSTNSSTYTMNTKTGTLPQN TVSKLDTGYSCEARNVGYRCPGKRMQVDDLNIS 238
QY 217 GIIAAVVVALVSVGLGVCAVQAKGYFSKTSFQKSNSSSKATMSNDPKHTKSFII 276
Db 239 GIIAAVVVALVSVGLGVCAVQAKGYFSKTSFQKSNSSSKATMSNDPKHTKSFII 298

RESULT 8
AAU00512
ID AAU00512 standard; Protein; 298 AA.
XX AC AAU00512;
XX DT 09-MAY-2001 (first entry)
XX DE Human junctional adhesion protein (JAM2).
XX KW Junctional adhesion protein; JAM2; cellular localisation;
KW cellular expression; immunoprecipitation; stroke; phosphorylation;
KW glycosylation; paracellular migration; inflammatory disease;
KW arthritis; asthma; rheumatoid arthritis; inflammatory bowel disease;
XX Crohn's disease.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers

FT	Peptide	1..20	/note= "Possible signal peptide #1"	
FT	Peptide	1..28	/note= "Possible signal peptide #2"	
FT	Protein	21..298	/note= "Possible mature JAM2 #1"	
FT	Protein	29..298	/note= "Possible mature JAM2 #2"	
FT	Domain	237..254	/note= "Transmembrane domain"	
XX				
PN	W0200114404-A1.			
XX				
XX	01-MAR-2001.			
XX				
XX	23-AUG-2000; 2000WO-US231159.			
PF				
XX				
PR	24-AUG-1999; 99US-0150459.			
XX				
XX	(TEXA-) TEXAS BIOTECHNOLOGY CORP.			
XX				
PI	Cunningham S, Trindad Arrate Barros M;			
XX				
XX	WPI; 2001-218425/22.			
DR	N-PSDB; AAS00512.			
XX				
XX	Novel nucleic acids encoding human junctional adhesion protein useful for producing antibodies that are suitable for therapeutic purposes -			
PT				
XX				
PS	Claim 4; Page 46-47; Sipp; English.			
XX				
CC	The sequence represents a human junctional adhesion molecule 2 (JAM2).			
CC	The polynucleotide encoding the polypeptide is useful for recombinant production of JAM-2 protein, which in turn is useful for the production of antibodies. The antibodies may be used for probing cellular localisation and/or expression of JAM2 in tissues under normal and disease states, for immunoprecipitating JAM2 protein from cells and/or stroke tissues to determine whether it is modified by glycosylation and phosphorylation, and for determining JAM2 function. The antibodies inhibit interaction of JAM2 with inflammatory cells or influences their paracellular migration, and is therefore useful for alleviating inflammatory diseases such as arthritis, asthma, rheumatoid arthritis, inflammatory bowel disease and Crohn's disease.			
XX				
SQ	Sequence 298 AA;			
	Query Match	87.08; Score 240; DB 22; Length 298;		
	Best Local Similarity	100.0%; Pred. No. 3e-227;		
	Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;			
QY	37 SRLEWKLGKRSVSVFYVYQQTLOQDFKRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96			
Db	59 SRLEWKLGKRSVSVFYVYQQTLOQDFKRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118			
QY	97 QNLIEDTTLVLVAPVAPVCEVPSSALSGTVVELRCQDKEGNPAPEYTFWKDGIRLLEN 156			
Db	119 QNLIEDTTLVLVAPVAPVCEVPSSALSGTVVELRCQDKEGNPAPEYTFWKDGIRLLEN 178			
QY	157 PRIGSQSTNSSYTNTKTGTLQNTVSKLDTGYSCEARNVGYRRCPGKRMQVDDLNIS 216			
Db	179 PRIGSQSTNSSYTNTKTGTLQNTVSKLDTGYSCEARNVGYRRCPGKRMQVDDLNIS 238			
QY	217 GIIAAVVVALVTSVGLGVGYAQRKGYSFKETSFOKSNSSSKATTMSSEDFKHTKSFII 276			
Db	239 GIIAAVVVALVTSVGLGVGYAQRKGYSFKETSFOKSNSSSKATTMSSEDFKHTKSFII 298			
RESULT 9				
ABP61801				
ID	ABP61801 standard; Protein; 298 AA.			
XX				
AC	ABP61801;			
XX				

DT	04-OCT-2002 (first entry)			
XX				
DE	Human polypeptide SEQ ID NO 155.			
XX				
KW	Human; cytostatic; antirheumatic; antiarthritic; vulnery; analgesic; antiinflammatory; antibacterial; immunosuppressive; antiparkinsonian; neuroprotective; nootropic; osteopathic; haemostatic; vasotropic; antiulcer; fungicide; antidiabetic; antiasthmatic; antiallergic; immunostimulant; antiparasitic; secreted protein; transmembrane protein; cytokine; cell proliferation; cell differentiation; autoimmune disease; stem cell; growth factor; nervous system disease; neuropathy; Alzheimer's disease; Parkinson's disease; Huntington's disease; osteoporosis; severe combined immunodeficiency; SCID; infection; multiple sclerosis; rheumatoid arthritis; gene therapy.			
XX				
OS	Homo sapiens.			
XX				
PN	US2002065394-A1.			
XX				
XX	30-MAY-2002.			
XX				
PF	22-DEC-2000; 2000US-0745763.			
XX				
XX	18-MAR-1998; 98US-0040963.			
XX				
PA	(JACO/) JACOBS K.			
PA	(MCCO/) MCCOY J M.			
PA	(LAVA/) LAVALLIE E R.			
PA	(COLL/) COLLINS-RACIE L A.			
PA	(EVAN/) EVANS C.			
PA	(MERB/) MERBERG D.			
PA	(TREA/) TREACY M.			
PA	(SPAU/) SPAULDING V.			
XX				
PI	Jacobs K, McCoy JM, LaVallie ER, Collins-Racie LA, Evans C;			
PI	Merberg D, Treacy M, Spaulding V;			
XX				
XX	WPI; 2002-582343/62.			
DR	N-PSDB; ABQ92017.			
XX				
PT	Novel secreted or transmembrane protein and polynucleotide encoding the protein, useful for diagnosis and treatment of neurological disorders, cancer, autoimmune diseases, bone disorders and lung or liver fibrosis			
PT				
XX				
PS	Claim 54; Page 116-117; 284pp; English.			
XX				
CC	The invention relates to human secreted or transmembrane protein (I), their fragments and is encoded by specific complementary deoxyribonucleic acid (CDNA) inserts (II), where the protein is substantially free from other mammalian proteins. (I) are useful for preventing, treating or ameliorating a medical condition, especially immunological treatment or prevention of tumours. (I) exhibits activity relating to angiogenesis, cytokine, cell proliferation, cell differentiation, antiinflammatory, stem cell growth factor activity and activin or inhibin-related activities. (I) can be used to manipulate stem cells in culture to give rise to neuroepithelial cells that can be used to augment or replace cells damaged by illness, autoimmune disease, accidental damage or genetic disorders. (I) induces the proliferation of neural cells and regeneration of nerve and brain tissue and is useful for the treatment of central and peripheral nervous system diseases and neuropathies, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis. (I) is involved in chemotactic or chemokinetic activity, regulation of haematopoiesis and is useful for treating myeloid or lymphoid cell disorders, platelet disorders such as thrombocytopaenia and for regeneration of bone, cartilage, tendon, ligament and/or nerve tissue growth and in tissue repair, healing of burns, incisions, ulcers, for treating osteoporosis, osteoarthritis, bone degenerative disorders, periodontal disease. (I) is also useful for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues, various immune deficiencies and disorders including severe combined immunodeficiency (SCID), bacterial or fungal infections, autoimmune disorders e.g. multiple sclerosis, rheumatoid arthritis,			

CC diabetes mellitus, myasthenia gravis, allergic reactions and conditions,
 CC such as asthma or other respiratory problems. (II) is useful to express
 CC recombinant protein, as markers for tissues in which the corresponding
 CC protein is preferentially expressed and in gene therapy. The present
 CC sequence is that of a polypeptide of the invention.

XX Sequence 298 AA;
 SQ
 Query Match 87.0%; Score 240; DB 23; Length 298;
 Best Local Similarity 100.0%; Pred. No. 3e-227;
 Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 37 SRLWKKLGRSVFVYQQTLOGDFKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSQ 96
 DB 59 SRLWKKLGRSVFVYQQTLOGDFKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSQ 118
 QY 97 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVLRQCKEGNPAPEYTFWFKDGIRLLEN 156
 DB 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVLRQCKEGNPAPEYTFWFKDGIRLLEN 178
 QY 157 PRLGSQSTNSSYTMNTKTGTQLQFNTVSKLDTGEYSCEARNVGYRRCCKRMQVDDLNIS 216
 DB 179 PRLGSQSTNSSYTMNTKTGTQLQFNTVSKLDTGEYSCEARNVGYRRCCKRMQVDDLNIS 238
 QY 217 GIIAAVVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSPFI 276
 DB 239 GIIAAVVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSPFI 298

RESULT 10
 AA016452
 ID AA016452 standard; protein; 298 AA.
 XX
 AC AA016452;
 XX
 DT 17-APR-2003 (first entry)
 XX
 DE Human junctional adhesion molecule 2 (huJAM2).
 XX
 KW Human; gene therapy; extracellular region; junctional adhesion molecules;
 KW huJAM; immune system disorder; immune deficiency; autoimmune disorder;
 KW inflammatory disorder; cancer; wound healing; cardiovascular disease;
 KW full-length membrane-bound huJAM protein.
 XX
 OS Homo sapiens.

XX Key Location/Qualifiers
 FH Peptide 1..28
 FT /label= Signal_peptide
 FT Domain 29...236
 FT /note= "Extracellular domain; Specifically claimed
 FT region"
 FT Protein 29..298
 FT /note= "Mature huJAM2"

XX WO2003008541-A2.
 XX
 XX 30-JAN-2003.
 XX
 XX 05-JUL-2002; 2002WO-US19800.
 XX
 XX 16-JUL-2001; 2001US-305752P.
 PR 05-FEB-2002; 2002US-354345P.
 XX
 XX (BLIL) LILLY & CO ELI.
 PA
 XX Heuer JG, Smith RC, Su EW;
 XX
 XX WPI; 2003-221848/21.
 DR N-PSDB; AAL51599.
 XX
 XX New extracellular human junctional adhesion molecule (huJAM)
 FT polypeptide, useful for treating an immune system disorder such as an

PT immune deficiency or an inflammatory disorder, cancer, wound healing,
 PT or a cardiovascular disease -
 XX
 PS Disclosure; Fig 1; 131pp; English.
 XX
 CC The invention comprises the DNA and protein sequences of the
 CC extracellular region of human junctional adhesion molecules (huJAM). The
 CC extracellular huJAM DNA and protein sequences are useful in the treatment
 CC of: immune system disorders (e.g. immune deficiency); autoimmune
 CC disorders; inflammatory disorders; cancer; wound healing; or a
 CC cardiovascular disease. The present amino acid sequence represents the
 CC full-length membrane-bound huJAM2 protein.

XX Sequence 298 AA;
 SQ
 Query Match 87.0%; Score 240; DB 24; Length 298;
 Best Local Similarity 100.0%; Pred. No. 3e-227;
 Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 37 SRLWKKLGRSVFVYQQTLOGDFKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSQ 96
 DB 59 SRLWKKLGRSVFVYQQTLOGDFKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSQ 118
 QY 97 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVLRQCKEGNPAPEYTFWFKDGIRLLEN 156
 DB 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVLRQCKEGNPAPEYTFWFKDGIRLLEN 178
 QY 157 PRLGSQSTNSSYTMNTKTGTQLQFNTVSKLDTGEYSCEARNVGYRRCCKRMQVDDLNIS 216
 DB 179 PRLGSQSTNSSYTMNTKTGTQLQFNTVSKLDTGEYSCEARNVGYRRCCKRMQVDDLNIS 238
 QY 217 GIIAAVVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSPFI 276
 DB 239 GIIAAVVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSPFI 298

RESULT 11
 AA08060
 ID AA08060 standard; Protein; 312 AA.
 XX
 AC AA08060;
 XX
 DT 11-SEP-2000 (first entry)
 XX
 DE Human PRO245 protein.
 XX
 KW Inflammatory cell infiltration; immune response; T cell proliferation;
 KW anti-inflammatory; anti-autoimmune; anti-diabetic; spondyloarthropathy;
 KW T cell-mediated disease; spondyloarthropathy; sclerosis; renal disease;
 KW inflammatory myopathy; hemolytic anemia; thrombocytopenia; thyroiditis;
 KW diabetes mellitus; demyelinating polyneuropathy; Guillain-Barre syndrome;
 KW multiple sclerosis; polyneuropathy; hepatitis; cirrhosis; enteropathy;
 KW sclerosing cholangitis; inflammatory bowel disease; Whipple's disease;
 KW skin disease; dermatitis; psoriasis; asthma; allergic rhinitis; tumor;
 KW food hypersensitivity; urticaria; eosinophilic pneumonia; transplant;
 KW idiopathic pulmonary fibrosis; graft rejection; PRO245; human.
 XX
 OS Homo sapiens.
 XX
 XX WO9914241-A2.
 XX
 XX 25-MAR-1999.
 XX
 XX 17-SEP-1998; 98WO-US19437.
 XX
 XX 17-SEP-1997; 97US-0059119.
 PR 18-SEP-1997; 97US-0059263.
 PR 28-OCT-1997; 97US-0063550.
 PR 12-NOV-1997; 97US-0065186.
 PR 21-NOV-1997; 97US-0066364.
 PR 24-NOV-1997; 97US-0066770.
 PR 04-JUN-1998; 98US-0088026.
 XX

PA	(GETH) GENENTECH INC.	
XX	Fong S, Goddard A, Gurney AL, Tumas D, Wood WI;	
XX	WPI; 1999-229499/19.	
DR	N-PSDB; AAX37664.	
XX	Composition containing novel polypeptide PRO245, its agonist or	
PT	antagonist -	
XX	Example 1; Fig 2; 177pp; English.	
XX	This invention describes a novel composition containing (apart from a	
CC	carrier or excipient), a novel PRO245 polypeptide (I), its agonist or	
CC	antagonist, or their fragments, for modulating: (i) infiltration of	
CC	inflammatory cells into tissue; (ii) an immune response; or (iii) T cell	
CC	proliferation. The composition increases or decreases any of the effects	
CC	(i)-(iii). The products of the invention have anti-inflammatory,	
CC	anti-autoimmune and anti-diabetic activity. (I), and its (ant)agonists	
CC	and their fragments, are used to treat immune-related diseases,	
CC	particularly T cell-mediated diseases. The diseases treated include	
CC	systemic lupus erythematosus, rheumatoid arthritis, juvenile chronic	
CC	arthritis, spondyloarthropathies, systemic sclerosis (scleroderma),	
CC	idiopathic inflammatory myopathies (dermatomyositis, polymyositis),	
CC	Sjogren's syndrome, systemic vasculitis, sarcoidosis, autoimmune	
CC	hemolytic anemia (immune pancytopenia, paroxysmal nocturnal	
CC	hemoglobinuria), autoimmune thrombocytopenia (idiopathic thrombocytopenic	
CC	purpura immune-mediated thrombocytopenia), thyroiditis (Grave's disease,	
CC	Hashimoto's thyroiditis, juvenile lymphocytic thyroiditis, atrophic	
CC	thyroiditis), diabetes mellitus, immune-mediated renal disease	
CC	(glomerulonephritis, tubulointerstitial nephritis), multiple sclerosis,	
CC	idiopathic demyelinating polyneuropathy, Guillain-Barre syndrome, chronic	
CC	inflammatory demyelinating polyneuropathy, infectious hepatitis	
CC	(hepatitis A, B, C, D, E and other non-hepatotropic viruses), autoimmune	
CC	chronic active hepatitis, primary biliary cirrhosis, granulomatous	
CC	hepatitis, and sclerosing cholangitis, inflammatory bowel disease	
CC	(ulcerative colitis: Crohn's disease), gluten-sensitive enteropathy, and	
CC	Whipple's disease. Autoimmune or immune-mediated skin diseases including	
CC	bullous skin diseases, erythema multiforme, contact dermatitis, psoriasis,	
CC	asthma, allergic rhinitis, atopic dermatitis, food hypersensitivity,	
CC	urticaria, eosinophilic pneumonia, idiopathic pulmonary fibrosis,	
CC	hypersensitivity pneumonitis, and transplantation associated diseases	
CC	(graft rejection, and graft-versus-host-disease). (I), its (ant)agonists	
CC	or fragment can also be used as an adjuvant in treatment of tumors.	
CC	Antibodies against (I) can also be used for diagnosing such diseases.	
CC	This sequence represents the human PRO245 protein described in the	
XX	invention.	
SQ	Sequence 312 AA;	
	Query Match 83.3%; Score 230; DB 20; Length 312;	
	Best Local Similarity 100.0%; Pred. No. 2.1e-217;	
	Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
QY	37 SRLEKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96	
Db		
59 SRLEKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118		
QY	97 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTFWKDGIRLLEN 156	
Db		
119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTFWKDGIRLLEN 178		
QY	157 PRIGSQSTNSSYTNKTKTGLQNTVTSKLTGTGYSCEARNVGYRRCPGKRMQVDDLNIS 216	
Db		
179 PRIGSQSTNSSYTNKTKTGLQNTVTSKLTGTGYSCEARNVGYRRCPGKRMQVDDLNIS 238		
QY	217 GIIAVAVVVALVTSVCGLVGCYVQKGYFSKETSFKQSNSSSKATTMSN 266	
Db		
239 GIIAVAVVVALVTSVCGLVGCYVQKGYFSKETSFKQSNSSSKATTMSN 288		
	RESULT 12	
	AAY23324	

ID	AAV23324 standard; Protein; 312 AA.	
XX	AAV23324;	
AC	02-SEP-1999 (first entry)	
DT	A33 related antigen PRO245.	
XX	A33 related antigen PRO245.	
DE	A33 related antigen; PRO301; PRO362; PRO245; inflammatory disease;	
XX	tumour.	
KW	Homo sapiens.	
OS	WO9927098-A2.	
XX	03-JUN-1999.	
XX	20-NOV-1998; 98WO-US24855.	
PF	17-SEP-1998; 98WO-US19437.	
PR	21-NOV-1997; 97US-0066364.	
PR	20-MAR-1998; 98US-0078936.	
XX	(GETH) GENENTECH INC.	
PA	Askenazi A, Fong S, Goddard A, Gurney AL, Napier MA;	
PI	Tumas D, Wood WI;	
XX	WPI; 1999-404743/34.	
DR	N-PSDB; AAX81770.	
XX	Antigens PRO301, PRO362 and PRO245 related to A33	
PT	Example 3; Fig 11; 122pp; English.	
XX	The specification describes A33 related antigens PRO301, PRO362 and	
CC	PRO245. The methods and compositions of the invention are useful for the	
CC	treatment and diagnosis of inflammatory disease and tumours in mammals.	
CC	Such inflammatory diseases include of inflammatory bowel disease,	
CC	systemic lupus erythematosus, rheumatoid arthritis, juvenile chronic	
CC	arthritis, spondyloarthropathies, systemic sclerosis, scleroderma,	
CC	idiopathic inflammatory myopathies, dermatomyositis, polymyositis,	
CC	Sjogren's syndrome, systemic vasculitis, sarcoidosis, autoimmune hemolytic	
CC	anemia, immune pancytopenia, paroxysmal nocturnal hemoglobinuria,	
CC	autoimmune thrombocytopenia, idiopathic thrombocytopenic purpura,	
CC	immune-mediated thrombocytopenia, thyroiditis, Grave's disease,	
CC	Hashimoto's thyroiditis, juvenile lymphocytic thyroiditis, atrophic	
CC	thyroiditis, diabetes mellitus, immune-mediated renal disease,	
CC	glomerulonephritis, tubulointerstitial nephritis, demyelinating diseases	
CC	of the central and peripheral nervous systems such as multiple sclerosis,	
CC	idiopathic polyneuropathy, hepatobiliary diseases, infectious hepatitis,	
CC	A, B, C, D, E, nonhepatotropic viruses, autoimmune chronic active	
CC	hepatitis, primary biliary cirrhosis, granulomatous hepatitis, sclerosing	
CC	cholangitis, inflammatory and fibrotic lung diseases, gluten-sensitive	
CC	enteropathy, Whipple's disease, autoimmune or immune-mediated skin	
CC	diseases allergic diseases of the lung such as eosinophilic pneumoniae,	
CC	idiopathic pulmonary fibrosis and hypersensitivity pneumonitis	
CC	transplantation associated diseases disease. The present sequence	
CC	represents PRO245.	
XX	Sequence 312 AA;	
SQ	Query Match 83.3%; Score 230; DB 20; Length 312;	
	Best Local Similarity 100.0%; Pred. No. 2.1e-217;	
	Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
QY	37 SRLEKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96	
Db		
59 SRLEKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118		
QY	97 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTFWKDGIRLLEN 156	
Db		
119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTFWKDGIRLLEN 178		

QY 157 PRLGSSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCAARNVGYRRCPCGRKMQVDDLNIS 216
|||||
Db 179 PRLGSSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCAARNVGYRRCPCGRKMQVDDLNIS 238
|||||
QY 217 GIIAAVVVVVALVISVGLGVCVCAQRKGYFSKETSFOKSNSSSKATTMSN 266
|||||
Db 239 GIIAAVVVVVALVISVGLGVCVCAQRKGYFSKETSFOKSNSSSKATTMSN 288
|||||
RESULT 13
AAV13354
ID AAV13354 standard; Protein; 312 AA.
XX
XX AAV13354;
XX AC
XX DT 25-JUN-1999 (first entry)
XX DE Amino acid sequence of protein PRO245.
XX KW Secreted protein; transmembrane protein; human; enterocolitis;
KW Zollinger-Ellison syndrome; Gastrointestinal ulceration;
KW congenital microvillus atrophy; skin disease; cell growth;
KW abnormal keratinocyte differentiation; psoriasis; epithelial cancer;
KW Parkinson's disease; Alzheimer's disease; ALS; neuropathy;
KW fibromodulin; dermal scarring; Usher Syndrome; Atrophia areata;
KW anti-thrombotic; wound healing; tissue repair.
XX OS Homo sapiens.
XX XX
XX PN W09914328-A2.
XX PD
XX PF 25-MAR-1999.
XX PR 16-SEP-1998; 98MO-US19330.
XX PR 25-NOV-1997; 97US-006840.
PR 17-SEP-1997; 97US-0059113.
PR 17-SEP-1997; 97US-0059115.
PR 17-SEP-1997; 97US-0059117.
PR 17-SEP-1997; 97US-0059119.
PR 17-SEP-1997; 97US-0059121.
PR 17-SEP-1997; 97US-0059122.
PR 17-SEP-1997; 97US-0059184.
PR 18-SEP-1997; 97US-0059263.
PR 18-SEP-1997; 97US-0059266.
PR 15-OCT-1997; 97US-0062125.
PR 17-OCT-1997; 97US-0062285.
PR 17-OCT-1997; 97US-0062287.
PR 21-OCT-1997; 97US-0063486.
PR 24-OCT-1997; 97US-0062814.
PR 24-OCT-1997; 97US-0062816.
PR 24-OCT-1997; 97US-0063045.
PR 24-OCT-1997; 97US-0063120.
PR 24-OCT-1997; 97US-0063121.
PR 24-OCT-1997; 97US-0063127.
PR 24-OCT-1997; 97US-0063128.
PR 27-OCT-1997; 97US-0063329.
PR 27-OCT-1997; 97US-0063327.
PR 28-OCT-1997; 97US-0063541.
PR 28-OCT-1997; 97US-0063542.
PR 28-OCT-1997; 97US-0063544.
PR 28-OCT-1997; 97US-0063704.
PR 28-OCT-1997; 97US-0063732.
PR 29-OCT-1997; 97US-0063738.
PR 29-OCT-1997; 97US-0064215.
PR 29-OCT-1997; 97US-0063735.
PR 31-OCT-1997; 97US-0063870.

PR 31-OCT-1997; 97US-0064103.
PR 03-NOV-1997; 97US-0064248.
PR 07-NOV-1997; 97US-0064809.
PR 12-NOV-1997; 97US-0065186.
PR 17-NOV-1997; 97US-0065846.
PR 18-NOV-1997; 97US-0065693.
PR 21-NOV-1997; 97US-0066120.
PR 21-NOV-1997; 97US-0066364.
PR 24-NOV-1997; 97US-0066772.
PR 24-NOV-1997; 97US-0066466.
PR 24-NOV-1997; 97US-0066770.
PR 24-NOV-1997; 97US-0066511.
PR 24-NOV-1997; 97US-0066453.
XX
XX (GETH) GENENTECH INC.
XX PI Chen J, Goddard A, Gurney AL, Pennica D, Wood WI, Yuan J;
XX DR WPI; 1999-229533/19.
XX DR N-PSDB; AAX52225.
XX DR New isolated human genes and polypeptides used in, e.g. treatment of
PT gastrointestinal ulceration
XX
XX Claim 12; Fig 24; 320pp; English.
XX
CC AAV13344-403 represent secreted and transmembrane human proteins.
CC The cDNA sequences are obtained from cDNA libraries, prepared from
CC fetal lung, fetal kidney, fetal brain, fetal liver and fetal retina.
CC The encoded polypeptides have specific uses based on their homology to
CC known polypeptides, e.g. PRO211 and PRO217 can be used for disorders
CC associated with the preservation and maintenance of gastrointestinal
CC mucosa and the repair of acute and chronic mucosal lesions
CC (e.g. enterocolitis, Zollinger-Ellison syndrome, gastrointestinal
CC ulceration and congenital microvillus atrophy), skin diseases associated
CC with abnormal keratinocyte differentiation (e.g. psoriasis, epithelial
CC cancers such as lung squamous cell carcinoma of the vulva and gliomas),
CC potent effects on cell growth and development, diseases related to
CC growth or survival of nerve cells including Parkinson's disease,
CC Alzheimer's disease, ALS, neuropathies or cancer. PRO265 can be used as
CC for fibromodulin, e.g. for reducing dermal scarring. PRO264 can be used
CC as a target for anti-tumor drugs. PRO533 may be used in the treatment
CC of Usher Syndrome or Atrophia areata; PRO269 can be used as an
CC anti-thrombotic agent; PRO287 polypeptides and portions may have
CC therapeutic applications in wound healing and tissue repair; PRO317 can
CC be used for treating problems of the kidney, uterus, endometrium, blood
CC vessels, or related tissue, e.g. in the heart of genital tract.
XX
SQ Sequence 312 AA;

Query Match 83.3%; Score 230; DB 20; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 37 SRLEWKKLGRSVSFVYQQTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
|||||
Db 59 SRLEWKKLGRSVSFVYQQTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
|||||
QY 97 QNLEEDTVTLVLVAPVAFVCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 156
|||||
Db 119 QNLEEDTVTLVLVAPVAFVCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
|||||
QY 157 PRLGSSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCAARNVGYRRCPCGRKMQVDDLNIS 216
|||||
Db 179 PRLGSSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCAARNVGYRRCPCGRKMQVDDLNIS 238
|||||
QY 217 GIIAAVVVVVALVISVGLGVCVCAQRKGYFSKETSFOKSNSSSKATTMSN 266
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Db 239 GIIAAVVVVVALVISVGLGVCVCAQRKGYFSKETSFOKSNSSSKATTMSN 288
|||||
RESULT 14
AAB33421

ID AAB33421 standard; Protein; 312 AA.
 AC AAB33421;
 XX
 DT 29-JAN-2001 (first entry)
 XX
 DE Human PRO245 protein UNQ219 SEQ ID NO:36.
 XX
 KW Human; immune related disease; diagnosis; antinflammatory; cardiant;
 KW dermatological; antiarthritic; antirheumatic; immunosuppressive;
 KW haemostatic; antithyroid; antidiabetic; neutropenic; neuroprotective;
 KW antianemic; hepatotropic; virucide; antiporiatic; antiallergic;
 KW antiaethmatic; systemic lupus erythematosus; rheumatoid arthritis;
 KW osteoarthritis; spondyloarthropathy; systemic sclerosis; sarcoidosis;
 KW idiopathic inflammatory myopathy; Sjogren's syndrome; thyroiditis;
 KW systemic vasculitis; autoimmune haemolytic anaemia; diabetes mellitus;
 KW autoimmune thrombocytopaenia; immune-mediated renal disease;
 KW demyelinating disease; hepatobiliary disease; Whipple's disease;
 KW inflammatory bowel disease; gluten-sensitive enteropathy;
 KW autoimmune disease; immune-mediated skin disease; allergic disease;
 KW immunological disease; transplantation associated disease;
 KW graft rejection; graft-versus-host-disease.
 XX
 OS Homo sapiens.
 XX
 PN WQ200053758-A2.
 XX
 PD 14-SEP-2000.
 XX
 PF 02-MAR-2000; 2000WO-US05841.
 XX
 PR 08-MAR-1999; 99WO-US05028.
 PR 10-MAR-1999; 99US-0123618.
 PR 12-MAR-1999; 99US-0123957.
 PR 21-MAR-1999; 99US-0125775.
 PR 12-APR-1999; 99US-0128849.
 PR 20-APR-1999; 99WO-US08615.
 PR 28-APR-1999; 99US-0131445.
 PR 04-MAY-1999; 99US-0132371.
 PR 14-MAY-1999; 99US-0134287.
 PR 02-JUN-1999; 99WO-US12252.
 PR 23-JUN-1999; 99US-0141037.
 PR 20-JUL-1999; 99US-0144758.
 PR 26-JUL-1999; 99US-0145698.
 PR 28-JUL-1999; 99US-0146222.
 PR 01-SEP-1999; 99WO-US20111.
 PR 08-SEP-1999; 99WO-US20594.
 PR 13-SEP-1999; 99WO-US20944.
 PR 15-SEP-1999; 99WO-US21090.
 PR 15-SEP-1999; 99WO-US21547.
 PR 05-OCT-1999; 99WO-US23089.
 PR 29-OCT-1999; 99US-0162506.
 PR 30-NOV-1999; 99WO-US28214.
 PR 30-NOV-1999; 99WO-US28313.
 PR 30-NOV-1999; 99WO-US28409.
 PR 01-DEC-1999; 99WO-US28301.
 PR 01-DEC-1999; 99WO-US28634.
 PR 02-DEC-1999; 99WO-US28551.
 PR 02-DEC-1999; 99WO-US28564.
 PR 02-DEC-1999; 99WO-US28565.
 PR 16-DEC-1999; 99WO-US30095.
 PR 20-DEC-1999; 99WO-US30999.
 PR 30-DEC-1999; 99WO-US31274.
 PR 05-JAN-2000; 2000WO-US00219.
 PR 06-JAN-2000; 2000WO-US00277.
 PR 11-FEB-2000; 2000WO-US03565.
 PR 18-FEB-2000; 2000WO-US04341.
 PR 18-FEB-2000; 2000WO-US04342.
 PR 22-FEB-2000; 2000WO-US04414.
 XX
 PA (GETH) GENENTECH INC.
 XX

PI Ashkenazi AJ, Baker KP, Goddard A, Gurney AL, Hebert C, Henzel W;
 PI Kabakoff RC, Lu Y, Pan J, Pennica D, Shelton DL, Smith V;
 PI Stewart TA, Tumas D, Watanabe CK, Wood WI, Yan M;
 XX
 DR WPI; 2000-572271/53.
 DR N-PSDB; AAC58586.
 XX
 PT Sixty four PRO polypeptides, useful in the diagnosis and treatment of
 PT immune related disorders, e.g. systemic lupus erythematosus, rheumatoid
 PT arthritis, osteoarthritis, thyroiditis and diabetes mellitus -
 PS Claim 33; Fig 16; 309pp; English.
 XX
 CC The present invention describes sixty four human PRO proteins which can
 CC be used in the treatment of immune related diseases. The human PRO
 CC proteins, anti-PRO antibodies, agonists and antagonists are useful for
 CC treating and diagnosing immune related disorders. The disorders are
 CC selected from systemic lupus erythematosus, rheumatoid arthritis,
 CC osteoarthritis, juvenile chronic arthritis, spondyloarthropathies,
 CC systemic sclerosis, idiopathic chronic arthritis, myopathies, Sjogren's
 CC syndrome, systemic vasculitis, sarcoidosis, autoimmune haemolytic
 CC anaemia, autoimmune thrombocytopaenia, thyroiditis, diabetes mellitus,
 CC immune-mediated renal disease, demyelinating diseases of the central
 CC and peripheral nervous systems, hepatobiliary diseases, inflammatory
 CC bowel disease, gluten-sensitive enteropathy and Whipple's disease,
 CC autoimmune or immune-mediated skin diseases, allergic diseases,
 CC immunological diseases of the lung, and transplantation associated
 CC diseases including graft rejection and graft-versus-host-disease.
 CC AAC58397 to AAC58578 represent PCR primers and hybridisation probes used
 CC in the isolation of human PRO sequences. AAC58579 to AAC58642 and
 CC AAB33414 to AAB33477 represent human PRO polynucleotide and protein
 CC sequences given in the exemplification of the present invention.
 XX
 SQ Sequence 312 AA;
 XX

Query Match 83.3%; Score 230; DB 21; Length 312;
 Best Local Similarity 100.0%; Pred. No. 2.1e-217;
 Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 37 SRLEWKKLGRSVFVYQQTLQGDFFKNRAEMIDFNIRIKNVTSDAGKYCEVSAPSEQ 96
 DB 59 SRLEWKKLGRSVFVYQQTLQGDFFKNRAEMIDFNIRIKNVTSDAGKYCEVSAPSEQ 118
 QY 97 QNLEEDTVTLVLVAPVAPVPSCEVPSSALSGTVVELRCODKEGNPAPETWFKDGIRLLEN 156
 DB 119 QNLEEDTVTLVLVAPVAPVPSCEVPSSALSGTVVELRCODKEGNPAPETWFKDGIRLLEN 178
 QY 157 PRIGSQSTNSSSYTMTNTKTGTLPNTVSKLDTGEYSCEARNVSVYRCPGKRMQVDDLNIS 216
 DB 179 PRIGSQSTNSSSYTMTNTKTGTLPNTVSKLDTGEYSCEARNVSVYRCPGKRMQVDDLNIS 238
 QY 217 GIITAAVVVALVSVGLGVGYAQRKGYSKETSFOKSNSSSKATTMSSEN 266
 DB 239 GIITAAVVVALVSVGLGVGYAQRKGYSKETSFOKSNSSSKATTMSSEN 288
 XX
 RESULT 15
 AAB24401
 ID AAB24401 standard; Protein; 312 AA.
 XX
 AC AAB24401;
 XX
 DT 07-NOV-2000 (first entry)
 XX
 DE Human PRO245 protein sequence SEQ ID NO:67.
 XX
 KW Human; PRO; promotion; inhibition; angiogenesis; cardiovascularisation;
 KW diagnosis; trauma; wound; cancer; atherosclerosis; cardiac hypertrophy;
 KW angiogenic; proliferative; cardiant; cardiovascular; antiatherosclerotic;
 KW cytostatic; gene therapy; vaccine.
 XX
 OS Homo sapiens.
 XX

QY 217 GIIAAVVVVVALVISVGLGVCAORRGYFSKETSFOKSNSSSKATTMTSEN 266
Db 239 GIIAAVVVVVALVISVGLGVCAORRGYFSKETSFOKSNSSSKATTMTSEN 288

Search completed: December 9, 2003, 17:23:29
Job time : 36.5436 secs

PN WO200032221-A2.
XX 08-JUN-2000.
XX 30-NOV-1999; 99WO-US28313.
XX 01-DEC-1998; 98WO-US25108.
XX 16-DEC-1998; 98US-0112850.
XX 12-JAN-1999; 99US-0115554.
XX 08-MAR-1999; 99WO-US05028.
XX 12-MAR-1999; 99US-0123957.
XX 28-APR-1999; 99US-0131445.
XX 14-MAY-1999; 99US-0134287.
XX 02-JUN-1999; 99WO-US12252.
XX 23-JUN-1999; 99US-0141037.
XX 20-JUL-1999; 99US-0144758.
XX 26-JUL-1999; 99US-0145698.
XX 01-SEP-1999; 99WO-US20111.
XX 08-SEP-1999; 99WO-US20594.
XX 13-SEP-1999; 99WO-US20944.
XX 15-SEP-1999; 99WO-US21090.
XX 15-SEP-1999; 99WO-US21547.
XX 05-OCT-1999; 99WO-US23089.
XX 29-OCT-1999; 99US-0162506.

(GETH) GENENTECH INC.

PA Ashkenazi AJ, Baker KP, Ferrara N, Gerber H, Hillan KJ, Goddard A;
XX Godowski PJ, Gurney AL, Klein RD, Kuo SS, Paoni NF, Smith V;
PI Watanabe CK, Williams PM, Wood WT;
XX

DR WPI; 2000-412154/35.
DR N-PSDB; AAA77562.

XX Nucleic acids encoding PRO polypeptides useful for preventing
PT diagnosing and treating diagnosing a cardiovascular, endothelial or
PT angiogenic disorders in mammals -

PS Claim 72; Fig 28; 315pp; English.

XX The present invention describes nucleic acids encoding PRO polypeptides
CC useful for preventing, diagnosing and treating diagnosing a
CC cardiovascular, endothelial or angiogenic disorder in mammals by
CC modulating cell proliferation, angiogenesis and cardiovascularisation,
CC and for identifying agonists and antagonists of these processes. The
CC nucleic acids and the proteins they encode may be used in the
CC prevention, treatment and diagnosis of diseases associated with
CC inappropriate PRO expression such as cardiovascular, endothelial or
CC angiogenic disorders in mammals (e.g. atherosclerosis, cancers and
CC cardiac hypertrophy). For example, the nucleic acids (NCs) and vectors
CC containing them and the PRO polypeptide may be used to treat disorders
CC associated with decreased PRO expression. AAA77510 to AAA77721 and
CC AAB24388 to AAB24435 represent nucleotide and protein sequences used in
CC the exemplification of the present invention.

SQ Sequence 312 AA;

Query Match 83.3%; Score 230; DB 21; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 37 SRLEWKKLGRSVSVFYVQOTLQGGFKRAEMIDFNIRIKNTVTRSDAGKYRCEVSAPSEQ 96
Db 59 SRLEWKKLGRSVSVFYVQOTLQGGFKRAEMIDFNIRIKNTVTRSDAGKYRCEVSAPSEQ 118
QY 97 QNLEEDVTTLVLVAVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTFKDGIRLLEN 156
Db 119 QNLEEDVTTLVLVAVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTFKDGIRLLEN 178
QY 157 PRLGQSTNSYTNNTKGTGLQFNTVSKLDTGEYSCEARNVSVGYRRCPGKRMQVDDLNIS 216
Db 179 PRLGQSTNSYTNNTKGTGLQFNTVSKLDTGEYSCEARNVSVGYRRCPGKRMQVDDLNIS 238

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OM protein - protein search, using sw model
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Searched: 328717 seqs, 42310858 residues

Word size: 50
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Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	274	99.3	298	4	US-09-152-060-76
2	230	83.3	312	4	US-09-254-465A-9

ALIGNMENTS

RESULT 1
US-09-152-060-76
; Sequence 76, Application US/09152060
; Patent No. 6448230
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003P1.05
; CURRENT APPLICATION NUMBER: US/09/152,060
; EARLIER FILING DATE: 1998-09-11
; EARLIER APPLICATION NUMBER: PCT/US98/04858
; EARLIER FILING DATE: 1998-03-12
; EARLIER APPLICATION NUMBER: 60/040,762
; EARLIER FILING DATE: 1997-03-14
; EARLIER APPLICATION NUMBER: 60/040,710
; EARLIER FILING DATE: 1997-03-14
; EARLIER APPLICATION NUMBER: 60/050,934
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/048,100
; EARLIER FILING DATE: 1997-05-30

; EARLIER APPLICATION NUMBER: 60/048,357
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/048,189
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/057,765
; EARLIER FILING DATE: 1997-09-05
; EARLIER APPLICATION NUMBER: 60/048,970
; EARLIER FILING DATE: 1997-06-06
; EARLIER APPLICATION NUMBER: 60/068,368
; EARLIER FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 118
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 76
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-152-060-76

Query Match 99.3%; Score 274; DB 4; Length 298;
Best Local Similarity 100.0%; Pred. No. 2.5e-261;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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DB 23 YHKAYGFSAPKQOVWTAIXQEAILACKTPKTVXSRLEWKLGSRVSFVYQOTLOGD 82
QY 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQGNLEEDTDTLEVLVAPVPSCEVP 120
DB 83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQGNLEEDTDTLEVLVAPVPSCEVP 142
QY 121 SSALSGTWEILRCODKEGNPAPEYTWFKDGIIRLLENPRLGQSQTNSSTMTKGTLOFN 180
DB 143 SSALSGTWEILRCODKEGNPAPEYTWFKDGIIRLLENPRLGQSQTNSSTMTKGTLOFN 202
QY 181 TVSKLDTGEYSCEARNVGYRRCRPGKMOVDLNLISGIIAAVVVVALVISVCGLGVCYAO 240
DB 203 TVSKLDTGEYSCEARNVGYRRCRPGKMOVDLNLISGIIAAVVVVALVISVCGLGVCYAO 262
QY 241 RKGYSKETSFKQSNSSSKATTMSNDFKHTKSFII 276
DB 263 RKGYSKETSFKQSNSSSKATTMSNDFKHTKSFII 298

RESULT 2
US-09-254-465A-9
; Sequence 9, Application US/09254465A
; Patent No. 6410708
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; FILE REFERENCE: P1216R1(US)
; CURRENT APPLICATION NUMBER: US/09/254,465A
; CURRENT FILING DATE: 1999-03-05
; PRIOR APPLICATION NUMBER: PCT/US98/24855
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR FILING DATE: 1997-11-21

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; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 9
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-254-465A-9

Query Match      83.3%; Score 230; DB 4; Length 312;
Best Local Similarity 100.0%; Pred. No. 4.5e-218;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      37 SRLEWKKLGRSVSFVYQQTLQGDFFKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEQ 96
Db      59 SRLEWKKLGRSVSFVYQQTLQGDFFKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEQ 118

Qy      97 QNLEEDTVTLVLVAPVPSCEVPSSALSGTVVELRCODKEGNPAPEYTWFKDGIRLLEN 156
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Qy     157 PRLGSQSTNSSYTNMTKTGTLQFNVTSKLDTGEYSCEARNSVGYYRRCPEKRMQVDDLNIS 216
Db     179 PRLGSQSTNSSYTNMTKTGTLQFNVTSKLDTGEYSCEARNSVGYYRRCPEKRMQVDDLNIS 238

Qy     217 GIIAAVVVVALVISVCGLGVCYAQRKGYSKETSFKQSNSSSKATTWSEN 266
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Search completed: December 9, 2003, 17:26:38
Job time : 13.9443 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: December 9, 2003, 17:25:18 ; Search time 25.4843 Seconds
(without alignments)
2014.238 Million cell updates/sec

Title: US-09-852-797-76_COPY_23_298

Perfect score: 276

Sequence: 1 YHKAYGFSAPKQQQVTVAVX.....SSKATTMSNDPKHTKSFII 276

Scoring table:

OLIGO Gapop 60.0 , Gapext 60.0

Searched: 684280 seqs, 185983659 residues

Word size: 50

Total number of hits satisfying chosen parameters: 489

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database :

- Published Applications AA:*
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 - 2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
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 - 10: /cgn2_6/ptodata/1/pubpaa/US09B_PUBCOMB.pep.*
 - 11: /cgn2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep.*
 - 12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
 - 13: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep.*
 - 14: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep.*
 - 15: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep.*
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 - 17: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
 - 18: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	274	99.3	298	9	US-09-853-161-76
2	274	99.3	298	9	US-09-852-659A-76
3	274	99.3	298	10	US-09-852-797-76
4	240	87.0	298	9	US-09-745-763-38
5	240	87.0	298	9	US-09-799-777-30
6	240	87.0	298	15	US-10-139-849-2
7	240	87.0	298	16	US-10-192-791-2
8	230	83.3	312	10	US-09-909-320-64
9	230	83.3	312	10	US-09-909-088B-64
10	230	83.3	312	10	US-09-905-291A-64
11	230	83.3	312	10	US-09-953-499-9
12	230	83.3	312	10	US-09-902-853-64
13	230	83.3	312	10	US-09-907-824-64
14	230	83.3	312	10	US-09-907-841-64
15	230	83.3	312	11	US-09-904-011-64

16	230	83.3	312	11	US-09-906-742-64
17	230	83.3	312	11	US-09-906-838-64
18	230	83.3	312	11	US-09-907-613-64
19	230	83.3	312	11	US-09-907-942-64
20	230	83.3	312	11	US-09-904-859-64
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22	230	83.3	312	11	US-09-904-820-64
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24	230	83.3	312	11	US-09-906-646-64
25	230	83.3	312	11	US-09-906-700-64
26	230	83.3	312	11	US-09-903-786-64
27	230	83.3	312	11	US-09-902-903-64
28	230	83.3	312	11	US-09-903-749A-64
29	230	83.3	312	11	US-09-904-119-64
30	230	83.3	312	11	US-09-904-956-64
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32	230	83.3	312	11	US-09-907-794-64
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34	230	83.3	312	11	US-09-904-462-64
35	230	83.3	312	11	US-09-907-925-64
36	230	83.3	312	11	US-09-902-692-64
37	230	83.3	312	11	US-09-903-520-64
38	230	83.3	312	11	US-09-905-056-64
39	230	83.3	312	11	US-09-909-064-64
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41	230	83.3	312	11	US-09-905-381-64
42	230	83.3	312	11	US-09-905-088-64
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ALIGNMENTS

RESULT 1
US-09-853-161-76
; Sequence 76, Application US/09853161
; Patent No. US20020076756A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: PZ003P3
; CURRENT APPLICATION NUMBER: US/09/853,161
; CURRENT FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/265,583
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 09/152,060
; PRIOR FILING DATE: 1998-09-11
; PRIOR APPLICATION NUMBER: PCT/US98/04858
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/040,762
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/040,710
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/050,934
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,100
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,357
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,189
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/057,765
; PRIOR FILING DATE: 1997-09-05
; PRIOR APPLICATION NUMBER: 60/048,970
; PRIOR FILING DATE: 1997-06-06
; PRIOR APPLICATION NUMBER: 60/068,368
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 118
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76
; LENGTH: 298

; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-853-161-76

Query Match 99.3%; Score 274; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 4.5e-260;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Db 23 YHKAYGFSAPKQOVVTVAVXQEAAILACKTPKKTVXSRLEWKKLGRSVSFVYYQQTLOGD 82
QY 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOGQNLEEDVTTLVLVAPAVPSCEVP 120
Db 83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOGQNLEEDVTTLVLVAPAVPSCEVP 142
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Db 143 SSALSGTVVELRCQDKEGNPAPEYTWFKDGIIRLENPRLGQSQTNSSTYTMNTKTGTLOFN 202
QY 181 TVSKLDTGYSCEARNVGYRRCPGKRMQVDDNLNIGIIAAVVVALVSVCGLGVCYQAQ 240
Db 203 TVSKLDTGYSCEARNVGYRRCPGKRMQVDDNLNIGIIAAVVVALVSVCGLGVCYQAQ 262
QY 241 RKGYSKETSFOKSNSSSKATTMSENDFKHTKSFII 276
Db 263 RKGYSKETSFOKSNSSSKATTMSENDFKHTKSFII 298

RESULT 2

US-09-852-659A-76
; Sequence 76, Application US/09852659A
; Patent No. US20020077287A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003P4
; CURRENT APPLICATION NUMBER: US/09/852,659A
; CURRENT FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/265,583
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 09/152,060
; PRIOR FILING DATE: 1998-09-11
; PRIOR APPLICATION NUMBER: PCT/US98/04858
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/040,762
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/040,710
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/050,934
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,100
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,357
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,189
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/057,765
; PRIOR FILING DATE: 1997-09-05
; PRIOR APPLICATION NUMBER: 60/048,970
; PRIOR FILING DATE: 1997-06-06
; PRIOR APPLICATION NUMBER: 60/068,368
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 121
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76

; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-852-659A-76
Query Match 99.3%; Score 274; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 4.5e-260;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 YHKAYGFSAPKQOVVTVAVXQEAAILACKTPKKTVXSRLEWKKLGRSVSFVYYQQTLOGD 60
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QY 121 SSALSGTVVELRCQDKEGNPAPEYTWFKDGIIRLENPRLGQSQTNSSTYTMNTKTGTLOFN 180
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QY 181 TVSKLDTGYSCEARNVGYRRCPGKRMQVDDNLNIGIIAAVVVALVSVCGLGVCYQAQ 240
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QY 241 RKGYSKETSFOKSNSSSKATTMSENDFKHTKSFII 276
Db 263 RKGYSKETSFOKSNSSSKATTMSENDFKHTKSFII 298

RESULT 3

US-09-852-797-76
; Sequence 76, Application US/09852797
; Patent No. US20020172994A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003P2
; CURRENT APPLICATION NUMBER: US/09/852,797
; CURRENT FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/265,583
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 09/152,060
; PRIOR FILING DATE: 1998-09-11
; PRIOR APPLICATION NUMBER: PCT/US98/04858
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/040,762
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/040,710
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/050,934
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,100
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,357
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,189
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/057,765
; PRIOR FILING DATE: 1997-09-05
; PRIOR APPLICATION NUMBER: 60/048,970
; PRIOR FILING DATE: 1997-06-06
; PRIOR APPLICATION NUMBER: 60/068,368
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 118

SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 76
LENGTH: 298
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SITE
LOCATION: (42)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (58)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-852-797-76

Query Match 99.3%; Score 274; DB 10; Length 298;
Best Local Similarity 100.0%; Pred. No. 4.5e-260; Indels 0; Gaps 0;
Matches 276; Conservative 0; Mismatches 0;
QY 1 YHAYGFSAPKQDVVAVXVQEAIALACKTPKTKVXSRLEWKKLGRSVSFVYYQTLQGD 60
DB 23 YHAYGFSAPKQDVVAVXVQEAIALACKTPKTKVXSRLEWKKLGRSVSFVYYQTLQGD 82
QY 61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQONLEEDTVTLVLVAPAVPSCEVP 120
DB 83 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQONLEEDTVTLVLVAPAVPSCEVP 142
QY 121 SSALSGTVVLELRCQEGNPAPEYTFWKGIRLLENPRLGOSTNSSYTMNTKTGTLOFN 180
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DB 263 RKGYSKETSQKNSSSSKATMTSENDFKHTKSFII 298

RESULT 4
US-09-745-763-38
Sequence 38, Application US/09745763
Patent No. US20020065394A1
GENERAL INFORMATION:
APPLICANT: Jacobs, Kenneth
McCoy, John M.
Lavallie, Edward R.
Collins-Racie, Lisa A.
Evans, Cheryl
Merberg, David
Treach, Maurice
Spaulding, Vikki
TITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES
NUMBER OF SEQUENCES: 219
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genetics Institute, Inc.
STREET: 87 Cambridgepark Drive
CITY: Cambridge
STATE: MA
COUNTRY: U.S.A.
ZIP: 02140
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/745,763
FILING DATE: 18-Jun-2000
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Sprunger, Suzanne A.

REGISTRATION NUMBER: 41,323
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 498-8284
TELEFAX: (617) 876-5851
INFORMATION FOR SEQ ID NO: 38:
SEQUENCE CHARACTERISTICS:
LENGTH: 298 amino acids
TYPE: amino acid
STRANDEDNESS: <Unknown>
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 38:
US-09-745-763-38

Query Match 87.0%; Score 240; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 9.2e-227;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 37 SRLEWKKLGRSVSFVYYQTLQGD FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 96
DB 59 SRLEWKKLGRSVSFVYYQTLQGD FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118
QY 97 QNLEEDTVTLVLVAPAVPSCEVSFSSALSGTVVLELRCQEGNPAPEYTFWKGIRLLEN 156
DB 119 QNLEEDTVTLVLVAPAVPSCEVSFSSALSGTVVLELRCQEGNPAPEYTFWKGIRLLEN 178
QY 157 PRLGSQSTNSSYTMNTKTGTLOFN TVSKLDTGEYSCEARNVGYRRCPCGRMQVDDNLIS 216
DB 179 PRLGSQSTNSSYTMNTKTGTLOFN TVSKLDTGEYSCEARNVGYRRCPCGRMQVDDNLIS 238
QY 217 GIIAAVVVALVISVCGLGVCYQAORKGYSKETSQKNSSSSKATMTSENDFKHTKSFII 276
DB 239 GIIAAVVVALVISVCGLGVCYQAORKGYSKETSQKNSSSSKATMTSENDFKHTKSFII 298

RESULT 5
US-09-799-777-30
Sequence 30, Application US/09799777
Patent No. US20020091244A1
GENERAL INFORMATION:
APPLICANT: Lal, Preeti
Hillman, Jennifer L.
Corley, Neil C.
Guegler, Karl J.
Baugh, Mariah
Sather, Susan
Shah, Purvi
TITLE OF INVENTION: HUMAN SIGNAL PEPTIDE-CONTAINING PROTEINS
NUMBER OF SEQUENCES: 154
CORRESPONDENCE ADDRESS:
ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
STREET: 3174 PORTER DRIVE
CITY: PALO ALTO
STATE: CALIFORNIA
COUNTRY: USA
ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/799,777
FILING DATE: 06-Mar-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/002,485
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: BILLINGS, LUCY J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0459 US
TELECOMMUNICATION INFORMATION:

```

;
; TELEPHONE: (650) 855-0555
; TELEFAX: (650) 845-4166
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 298 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; IMMEDIATE SOURCE:
; LIBRARY: DUODNOT02
; CLONE: 1704050
; SEQUENCE DESCRIPTION: SEQ ID NO: 30 :
US-09-799-777-30

Query Match      87.0%; Score 240; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 9.2e-227;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 37 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
Db 59 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
QY 97 QNLEEDTVTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 156
Db 119 QNLEEDTVTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
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Db 179 PRLGSQSTNSSYTMNTKTGTLQFNVTGKLTGEYSCAERNVGYRRCPCGKRMQVDDLNIS 238
QY 217 GIIAAVVVVALVISVCGLVGVCAQRKGYSKETSFKNSNSSSKATTMSNDPFKHTKSFII 276
Db 239 GIIAAVVVVALVISVCGLVGVCAQRKGYSKETSFKNSNSSSKATTMSNDPFKHTKSFII 298

RESULT 6
US-10-139-849-2
; Sequence 2, Application US/10139849
; Publication No. US20030079238A1
; GENERAL INFORMATION:
; APPLICANT: Cunningham, Sonia
; TITLE OF INVENTION: A POLYNUCLEOTIDE ENCODING A HUMAN
; JUNCTIONAL ADHESION PROTEIN (JAM 2)
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Rockett, Milmanow & Katz, Ltd.
; STREET: 180 N. Stetson Avenue, 2 Prudential Plaza,
; Suite 4700
; CITY: Chicago
; STATE: IL
; COUNTRY: U.S.A.
; ZIP: 60601
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/139,849
; FILING DATE: 07-May-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/643,929
; FILING DATE: 23-Aug-2000
; ATTORNEY/AGENT INFORMATION:
; NAME: Katz, Martin L.
; REGISTRATION NUMBER: 25,011
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312-616-5400
; TELEFAX: 312-616-5460
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 298 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; IMMEDIATE SOURCE:
; LIBRARY: DUODNOT02
; CLONE: 1704050
; SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-10-139-849-2

Query Match      87.0%; Score 240; DB 15; Length 298;
Best Local Similarity 100.0%; Pred. No. 9.2e-227;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 37 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
Db 59 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
QY 97 QNLEEDTVTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 156
Db 119 QNLEEDTVTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
QY 157 PRLGSQSTNSSYTMNTKTGTLQFNVTGKLTGEYSCAERNVGYRRCPCGKRMQVDDLNIS 216
Db 179 PRLGSQSTNSSYTMNTKTGTLQFNVTGKLTGEYSCAERNVGYRRCPCGKRMQVDDLNIS 238
QY 217 GIIAAVVVVALVISVCGLVGVCAQRKGYSKETSFKNSNSSSKATTMSNDPFKHTKSFII 276
Db 239 GIIAAVVVVALVISVCGLVGVCAQRKGYSKETSFKNSNSSSKATTMSNDPFKHTKSFII 298

RESULT 7
US-10-192-791-2
; Sequence 2, Application US/10192791
; Publication No. US20030130166A1
; GENERAL INFORMATION:
; APPLICANT: Texas Biotechnology Corporation
; TITLE OF INVENTION: A Polynucleotide Encoding a Human Junctional Adhesion Protein (J
; FILE REFERENCE: TEX4542P0430
; CURRENT APPLICATION NUMBER: US/10/192,791
; CURRENT FILING DATE: 2003-12-10
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 2
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-10-192-791-2

Query Match      87.0%; Score 240; DB 16; Length 298;
Best Local Similarity 100.0%; Pred. No. 9.2e-227;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 37 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
Db 59 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
QY 97 QNLEEDTVTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 156
Db 119 QNLEEDTVTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
QY 157 PRLGSQSTNSSYTMNTKTGTLQFNVTGKLTGEYSCAERNVGYRRCPCGKRMQVDDLNIS 216
Db 179 PRLGSQSTNSSYTMNTKTGTLQFNVTGKLTGEYSCAERNVGYRRCPCGKRMQVDDLNIS 238
QY 217 GIIAAVVVVALVISVCGLVGVCAQRKGYSKETSFKNSNSSSKATTMSNDPFKHTKSFII 276
Db 239 GIIAAVVVVALVISVCGLVGVCAQRKGYSKETSFKNSNSSSKATTMSNDPFKHTKSFII 298

RESULT 8
US-09-909-320-64
; Sequence 64, Application US/09909320
; Patent No. US20020132240A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
```

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/ APPLICANT: Ashkenazi, Avi
/ APPLICANT: Botstein, David
/ APPLICANT: Deenoyers, Luc
/ APPLICANT: Eaton, Dan L.
/ APPLICANT: Ferrara, Napoleone
/ APPLICANT: Filvaroff, Ellen
/ APPLICANT: Fong, Sherman
/ APPLICANT: Gao, Wei-Qiang
/ APPLICANT: Gerber, Hanspeter
/ APPLICANT: Gerritsen, Mary E.
/ APPLICANT: Goddard, A.
/ APPLICANT: Godowski, Paul J.
/ APPLICANT: Grimaldi, Christopher J.
/ APPLICANT: Hillan, Kenneth, J.
/ APPLICANT: Kijavin, Ivar J.
/ APPLICANT: Mather, Jennie P.
/ APPLICANT: Pan, James
/ APPLICANT: Paoni, Nicholas F.
/ APPLICANT: Roy, Margaret Ann
/ APPLICANT: Stewart, Timothy A.
/ APPLICANT: Tumas, Daniel
/ APPLICANT: Williams, P. Mickey
/ APPLICANT: Wood, William, I.
/ TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
/ FILE REFERENCE: 10466-14
/ CURRENT APPLICATION NUMBER: US/09/909,320
/ PRIOR FILING DATE: 2002-01-04
/ PRIOR APPLICATION NUMBER: PCT/US00/04414
/ PRIOR FILING DATE: 2000-02-22
/ PRIOR APPLICATION NUMBER: US 60/143,048
/ PRIOR FILING DATE: 1999-07-07
/ PRIOR APPLICATION NUMBER: US 60/145,698
/ PRIOR FILING DATE: 1999-07-26
/ PRIOR APPLICATION NUMBER: US 60/146,222
/ PRIOR FILING DATE: 1999-07-28
/ PRIOR APPLICATION NUMBER: PCT/US99/20594
/ PRIOR FILING DATE: 1999-09-08
/ PRIOR APPLICATION NUMBER: PCT/US99/20944
/ PRIOR FILING DATE: 1999-09-13
/ PRIOR APPLICATION NUMBER: PCT/US99/21090
/ PRIOR FILING DATE: 1999-09-15
/ PRIOR APPLICATION NUMBER: PCT/US99/21547
/ PRIOR FILING DATE: 1999-09-15
/ PRIOR APPLICATION NUMBER: PCT/US99/23089
/ PRIOR FILING DATE: 1999-10-05
/ PRIOR APPLICATION NUMBER: PCT/US99/28214
/ PRIOR FILING DATE: 1999-11-29
/ PRIOR APPLICATION NUMBER: PCT/US99/28313
/ PRIOR FILING DATE: 1999-11-30
/ PRIOR APPLICATION NUMBER: PCT/US99/28564
/ PRIOR FILING DATE: 1999-12-02
/ PRIOR APPLICATION NUMBER: PCT/US99/28565
/ PRIOR FILING DATE: 1999-12-02
/ PRIOR APPLICATION NUMBER: PCT/US99/30095
/ PRIOR FILING DATE: 1999-12-16
/ PRIOR APPLICATION NUMBER: PCT/US99/30911
/ PRIOR FILING DATE: 1999-12-20
/ PRIOR APPLICATION NUMBER: PCT/US99/30999
/ PRIOR FILING DATE: 1999-12-20
/ PRIOR APPLICATION NUMBER: PCT/US00/00219
/ PRIOR FILING DATE: 2000-01-05
/ NUMBER OF SEQ ID NOS: 423
/ SEQ ID NO 64
/ LENGTH: 312
/ TYPE: PRT
/ ORGANISM: Homo sapiens
/ US-09-909-320-64

Query Match      83.3%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 6.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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RESULT 9

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US-09-909-088B-64
/ Sequence 64, Application US/09909088B
/ Patent No. US20020146709A1
/ GENERAL INFORMATION:
/ APPLICANT: Genentech, Inc.
/ APPLICANT: Ashkenazi, Avi
/ APPLICANT: Botstein, David
/ APPLICANT: Deenoyers, Luc
/ APPLICANT: Eaton, Dan L.
/ APPLICANT: Ferrara, Napoleone
/ APPLICANT: Filvaroff, Ellen
/ APPLICANT: Fong, Sherman
/ APPLICANT: Gao, Wei-Qiang
/ APPLICANT: Gerber, Hanspeter
/ APPLICANT: Gerritsen, Mary E.
/ APPLICANT: Goddard, A.
/ APPLICANT: Godowski, Paul J.
/ APPLICANT: Grimaldi, Christopher J.
/ APPLICANT: Gurney, Austin L.
/ APPLICANT: Hillan, Kenneth, J.
/ APPLICANT: Kijavin, Ivar J.
/ APPLICANT: Mather, Jennie P.
/ APPLICANT: Pan, James
/ APPLICANT: Paoni, Nicholas F.
/ APPLICANT: Roy, Margaret Ann
/ APPLICANT: Stewart, Timothy A.
/ APPLICANT: Tumas, Daniel
/ APPLICANT: Williams, P. Mickey
/ APPLICANT: Wood, William, I.
/ TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
/ FILE REFERENCE: 10466-14
/ CURRENT APPLICATION NUMBER: US/09/909,088B
/ CURRENT FILING DATE: 2001-07-18
/ PRIOR APPLICATION NUMBER: PCT/US00/04414
/ PRIOR FILING DATE: 2000-02-22
/ PRIOR APPLICATION NUMBER: US 60/143,048
/ PRIOR FILING DATE: 1999-07-07
/ PRIOR APPLICATION NUMBER: US 60/145,698
/ PRIOR FILING DATE: 1999-07-26
/ PRIOR APPLICATION NUMBER: US 60/146,222
/ PRIOR FILING DATE: 1999-07-28
/ PRIOR APPLICATION NUMBER: PCT/US99/20594
/ PRIOR FILING DATE: 1999-09-08
/ PRIOR APPLICATION NUMBER: PCT/US99/20944
/ PRIOR FILING DATE: 1999-09-13
/ PRIOR APPLICATION NUMBER: PCT/US99/21090
/ PRIOR FILING DATE: 1999-09-15
/ PRIOR APPLICATION NUMBER: PCT/US99/21547
/ PRIOR FILING DATE: 1999-09-15
/ PRIOR APPLICATION NUMBER: PCT/US99/23089
/ PRIOR FILING DATE: 1999-10-05
/ PRIOR APPLICATION NUMBER: PCT/US99/28214
/ PRIOR FILING DATE: 1999-11-29
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; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-909-088B-64

Query Match 83.3%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 6.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 37 SRLEWKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
DB 59 SRLEWKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
QY 97 QNLEEDTTLVLVAPVPSCVPSSALSCTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 156
DB 119 QNLEEDTTLVLVAPVPSCVPSSALSCTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
QY 157 PRGQSSTNSSTMTKTGTQLQFNTVSKLDTGEYSCEARNSVGYRCPGKRMQVDDLNIS 216
DB 179 PRGQSSTNSSTMTKTGTQLQFNTVSKLDTGEYSCEARNSVGYRCPGKRMQVDDLNIS 238
QY 217 GIIAAVVVALVISVCGLGVCYQAQRKGYSKTSFKQSNSSSKATTMSN 266
DB 239 GIIAAVVVALVISVCGLGVCYQAQRKGYSKTSFKQSNSSSKATTMSN 288

RESULT 10
US-09-905-291A-64
; Sequence 64, Application US/09905291A
; Patent No. US20020160374A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic

; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/905,291A
; CURRENT FILING DATE: 2001-07-12
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-905-291A-64

Query Match 83.3%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 6.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 37 SRLEWKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
DB 59 SRLEWKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
QY 97 QNLEEDTTLVLVAPVPSCVPSSALSCTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 156
DB 119 QNLEEDTTLVLVAPVPSCVPSSALSCTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
QY 157 PRGQSSTNSSTMTKTGTQLQFNTVSKLDTGEYSCEARNSVGYRCPGKRMQVDDLNIS 216
DB 179 PRGQSSTNSSTMTKTGTQLQFNTVSKLDTGEYSCEARNSVGYRCPGKRMQVDDLNIS 238
QY 217 GIIAAVVVALVISVCGLGVCYQAQRKGYSKTSFKQSNSSSKATTMSN 266
DB 239 GIIAAVVVALVISVCGLGVCYQAQRKGYSKTSFKQSNSSSKATTMSN 288

RESULT 11
US-09-953-499-9
; Sequence 9, Application US/09953499
; Publication No. US20020182206A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.


```
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
; FILE REFERENCE: P1216R1(US)
; CURRENT APPLICATION NUMBER: US/09/953,499
; CURRENT FILING DATE: 2001-09-14
; PRIOR APPLICATION NUMBER: US/09/254,465
; PRIOR FILING DATE: 1999-03-05
; PRIOR APPLICATION NUMBER: PCT/US98/24855
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 9
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-953-499-9

Query Match      83.3%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 6.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 37 SRLEWKKLGRSVSFVYQOTLQGDGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
Db 59 SRLEWKKLGRSVSFVYQOTLQGDGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

QY 97 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTFWFDGIRLLEN 156
Db 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTFWFDGIRLLEN 178

QY 157 PRLGSQSTNSSTYTNMTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPCGKRMQVDDLNIS 216
Db 179 PRLGSQSTNSSTYTNMTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPCGKRMQVDDLNIS 238

QY 217 GIIAAVWVVALVISVCGLGVCYAQRKGYPFSKETSFKQNSSSSKATTMSN 266
Db 239 GIIAAVWVVALVISVCGLGVCYAQRKGYPFSKETSFKQNSSSSKATTMSN 288

; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; ACIDS ENCODING THE SAME
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/902,853
; CURRENT FILING DATE: 2001-07-10
; PRIOR APPLICATION NUMBER: US/09/665,350
; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-902-853-64

Query Match      83.3%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 6.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 37 SRLEWKKLGRSVSFVYQOTLQGDGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
Db 59 SRLEWKKLGRSVSFVYQOTLQGDGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

QY 97 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTFWFDGIRLLEN 156
Db 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTFWFDGIRLLEN 178

QY 157 PRLGSQSTNSSTYTNMTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPCGKRMQVDDLNIS 216
Db 179 PRLGSQSTNSSTYTNMTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPCGKRMQVDDLNIS 238

QY 217 GIIAAVWVVALVISVCGLGVCYAQRKGYPFSKETSFKQNSSSSKATTMSN 266
Db 239 GIIAAVWVVALVISVCGLGVCYAQRKGYPFSKETSFKQNSSSSKATTMSN 288

RESULT 12
US-09-902-853-64
; Sequence 64, Application US/09902853
; Publication No. US20020192659A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Kijavini, Ivar J.
; APPLICANT: Mathier, Jennie P.
; APPLICANT: Pan, James
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RESULT 13
US-09-907-824-64
; Sequence 64, Application US/09907824
; Publication No. US20020197671A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/907,824
; CURRENT FILING DATE: 2001-07-17
; PRIOR APPLICATION NUMBER: 09/665,350
; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64

; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-907-824-64
Query Match 83.3%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 6.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 37 SRLEWKKLGRSVSFVYQQTLOGDFKRAEMIDFNIRIKNVTNSDAGKYRCEVSAPSEQ 96
Db 59 SRLEWKKLGRSVSFVYQQTLOGDFKRAEMIDFNIRIKNVTNSDAGKYRCEVSAPSEQ 118
QY 97 QNLEEDTTLVLVAPVPSCVPSALSSTGVVLRQCDKEGPNAPPEYTFWKDGIRLLEN 156
Db 119 QNLEEDTTLVLVAPVPSCVPSALSSTGVVLRQCDKEGPNAPPEYTFWKDGIRLLEN 178
QY 157 PRIGSQSTNSSTYMTNTKTGTLQFNTVSKLDTGEYSCEARNSVGRRCPGKRMQVDDLNIS 216
Db 179 PRIGSQSTNSSTYMTNTKTGTLQFNTVSKLDTGEYSCEARNSVGRRCPGKRMQVDDLNIS 238
QY 217 GIIAAVVVVALVISVCGLGVCYAOQRKGYSKETSFKSNSSSKATMTSEN 266
Db 239 GIIAAVVVVALVISVCGLGVCYAOQRKGYSKETSFKSNSSSKATMTSEN 288
RESULT 14
US-09-907-841-64
; Sequence 64, Application US/09907841
; Publication No. US20020198366A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/907,841
; CURRENT FILING DATE: 2001-11-20
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13

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; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-907-841-64

Query Match      83.3%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 6.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  37 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOG 96
Db  59 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOG 118

QY  97 QNLEEDTTLVLVAPVPSCEVPSSALSGTVELRCQDEKGNPAPEYTFWFKDGIRLLEN 156
Db  119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVELRCQDEKGNPAPEYTFWFKDGIRLLEN 178

QY  157 PRLGQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCAARNVGYRRCPCGRMQVDDNLIS 216
Db  179 PRLGQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCAARNVGYRRCPCGRMQVDDNLIS 238

QY  217 GIIAAVVVVALVISVCGLGVCYAOAKGYFSKETSFOKSNSSSKATTMSN 266
Db  239 GIIAAVVVVALVISVCGLGVCYAOAKGYFSKETSFOKSNSSSKATTMSN 288

RESULT 15
US-09-904-011-64
; Sequence 64, Application US/09904011
; Publication No. US2003000350A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tunas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/904,011
; CURRENT FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: 09/665,350
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; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-904-011-64

Query Match      83.3%; Score 230; DB 11; Length 312;
Best Local Similarity 100.0%; Pred. No. 6.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  37 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOG 96
Db  59 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOG 118

QY  97 QNLEEDTTLVLVAPVPSCEVPSSALSGTVELRCQDEKGNPAPEYTFWFKDGIRLLEN 156
Db  119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVELRCQDEKGNPAPEYTFWFKDGIRLLEN 178

QY  157 PRLGQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCAARNVGYRRCPCGRMQVDDNLIS 216
Db  179 PRLGQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCAARNVGYRRCPCGRMQVDDNLIS 238

QY  217 GIIAAVVVVALVISVCGLGVCYAOAKGYFSKETSFOKSNSSSKATTMSN 266
Db  239 GIIAAVVVVALVISVCGLGVCYAOAKGYFSKETSFOKSNSSSKATTMSN 288

Search completed: December 9, 2003, 17:34:16
Job time : 26.4843 secs
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GenCore version 5.1.6
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: December 9, 2003, 17:21:03 ; Search time 13.4634 Seconds
(without alignments)
1971.458 Million cell updates/sec

Title: US-09-852-797-76_COPY_23_298

Perfect score: 276

Sequence: 1 VHKAYGFSAPKQQVTVAX.....SSKATTMSSEDFKTKSFII 276

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 283308 seqs, 96168682 residues

Word size : 50

Total number of hits satisfying chosen parameters: 0

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database :

PIR 76:*

1: pir1:*

2: pir2:*

3: pir3:*

4: pir4:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
---------------	-------	----------------	--------	-------	-------------

No matches found

Search completed: December 9, 2003, 17:25:56
Job time : 13.4634 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: December 9, 2003, 17:14:27 ; Search time 9.61672 Seconds
(without alignments)
1349.666 Million cell updates/sec

Title: US-09-852-797-76_COPY23_298
Perfect score: 276
Sequence: 1 YHKAYGFSAPKQDVVTVX.....SSKATTMSNDPKHTKSFII 276

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0
127863 seqs, 47026705 residues

Word size: 50

Total number of hits satisfying chosen parameters: 1

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database: SwissProt_41.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	240	87.0	298	1 JAM2_HUMAN	P57087 homo sapien

ALIGNMENTS

RESULT 1

JAM2_HUMAN

ID JAM2_HUMAN STANDARD; PRT; 298 AA.

AC P57087;

DT 16-OCT-2001 (Rel. 40, Created)

DT 16-OCT-2001 (Rel. 40, Last sequence update)

DT 15-SEP-2003 (Rel. 42, Last annotation update)

DE Junctional adhesion molecule 2 precursor (Vascular endothelial

DE junction-associated molecule) (VE-JAM).

GN JAM2 OR VEJAM OR C21ORF43.

OS Homo sapiens (Human).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

OX NCBI_TaxID=9606;

RN [1]

RP SEQUENCE FROM N.A.

RC TISSUE=Vascular endothelial cells;

RX MEDLINE=20317114; PubMed=10779521;

RA Palmeri D., van Zante A., Huang C.C., Hemmerich S., Rosen S.D.;

RT "Vascular endothelial junction-associated molecule, a novel member of

RT the immunoglobulin superfamily, is localized to intercellular

RL boundaries of endothelial cells.";

RL J. Biol. Chem. 275:19139-19145(2000).

RN [2]

RP SEQUENCE FROM N.A.

RC TISSUE=Placenta;

RX MEDLINE=20507930; PubMed=10945976;

FT CARBOHYD 98 98 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 187 187 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 236 236 N-LINKED (GLCNAC. . .) (POTENTIAL).
SQ SEQUENCE 298 AA; 33207 MW; CA78E518E22DCAEE CRC64;

Query Match 87.0%; Score 240; DB 1; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.6e-232;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 37 SRLEWKKLGRSVSFVYYQOTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
|||
Db 59 SRLEWKKLGRSVSFVYYQOTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
|||

QY 97 QNLEEDVTLEVLVAPVPSCEVPSSALSGTVVVELRCQDKEGNPAPEYTWFKDGIRLLEN 156
|||
Db 119 QNLEEDVTLEVLVAPVPSCEVPSSALSGTVVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
|||

QY 157 PRLGSTNSSTMTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNIS 216
|||
Db 179 PRLGSTNSSTMTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNIS 238
|||

QY 217 GIIAAVVVVALVISVGLGVCAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSFI 276
|||
Db 239 GIIAAVVVVALVISVGLGVCAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSFI 298
|||

Search completed: December 9, 2003, 17:24:01
Job time : 9.61672 secs

GenCore version 5.1.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:20:17 ; Search time 29.8118 Seconds
(without alignments)
2389.068 Million cell updates/sec

Title: US-09-852-797-76_COPY_23_298

Perfect score: 276

Sequence: 1 YHKAYGFSAPKQQVTVAVX.....SSKATTMSENDFKHTKSPFI 276

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 830525 seqs, 258052604 residues

Word size: 50

Total number of hits satisfying chosen parameters: 10

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database :

SPTREMBL_23.*

1: sp_archaea.*

2: sp_bacteria.*

3: sp_fungi.*

4: sp_human.*

5: sp_invertebrate.*

6: sp_mammal.*

7: sp_mhc.*

8: sp_organelle.*

9: sp_phage.*

10: sp_plant.*

11: sp_rodent.*

12: sp_virus.*

13: sp_vertebrate.*

14: sp_unclassified.*

15: sp_rvirus.*

16: sp_bacteriap.*

17: sp_archheap.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
---------------	-------	----------------	--------	----	----	-------------

No matches found

Search completed: December 9, 2003, 17:25:15
Job time : 29.8118 secs